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a RISC odyssey

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PRESS



ISSUE 229 JANUARY 2001 £4.20



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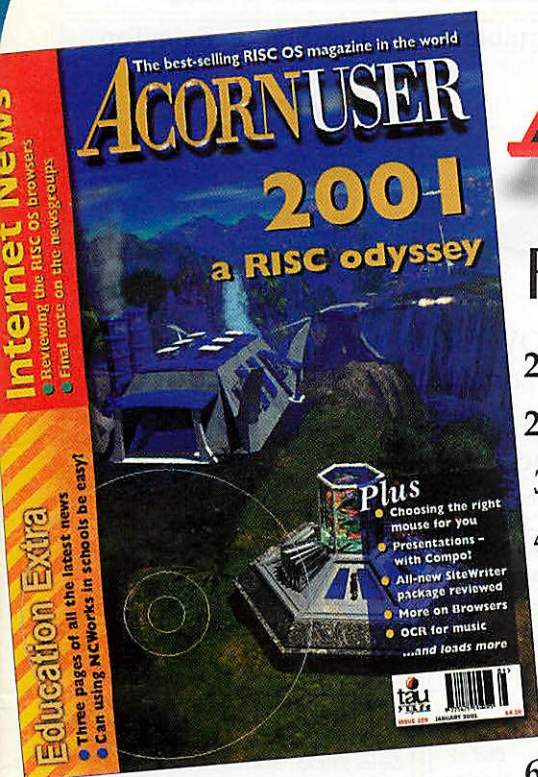
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but include VAT

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Items up to 2kg	£ 6
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Monitors	£23
Computers	£23

January 2001

ACORNUSER



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**February issue on sale
25th January 2001**



Exactly how the further development of RISC OS should proceed is something that taxes the minds of people who think they know best – of course, most of us do think we know best, after all if you can't trust yourself who can you trust?

I'm certainly not immune to this phenomenon so I thought I'd share some of my recent thoughts – stemming largely from what John Cartmell wrote about drawfiles in the Christmas Graphics column.

The file interface for both MacOS and Windows has been developing rapidly and something which the Mac has had for years, and Windows has had for rather less time is the ability to alter the icon of a file.

For both Windows and RISC OS this is a problem as the on-disc file structure doesn't permit it naturally. Enter drawfiles.

Quite a few RISC OS apps use the drawfile structure for their stored form. There's a displayable section which shows how the file is supposed to appear, and then a "private" section containing the application-specific data. This means any knowledgeable application can display the file, even if it can't edit it.

All RISC OS Ltd have to do is issue an edict saying that all file structures should now do this, and applications should include a small bit-map rendered version in the file as well. Then support that change so that when a Filer window is displayed each file can be checked and the bit-map displayed as the file's icon – plus you can get file preview into the bargain.

In fact this idea extends even further and it's something I might go into next time. The drawfile format is very powerful and could become a fundamental element of the RISC OS user interface in a way that could benefit us all.

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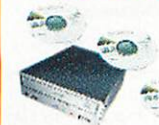
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Going all 32-bit

For some months the RISC OS community has been waiting for a particular piece of good news. Developers have been saying, "We're waiting for 32-bit" and it has been clear that we were waiting for an announcement from RISCOS Ltd or Pace. Surely someone was working on 32-bit compatibility? Could all those rumours be wrong — about over 25 programmers at Pace working on RISC OS? Perhaps there was good news in the offing, and the cause of all those smiles from developers we knew — but they just weren't saying.

At last an announcement came — from RISC OS and Pace — and although it's so far only a swallow, not a whole summer, it's indication that someone, somewhere is doing the work for which the whole of the RISC OS community is waiting.

The announcement?

"RISCOS Ltd and Pace Micro Technology PLC have today released a beta version of the components required for users of the Acorn C/C++ development environment to produce RISC OS programs that will be compatible with future 32-bit only versions of RISC OS."

It's important because, to have a future, RISC OS and RISC OS applications need to be compatible with 32-bit systems. If no-one was working towards this compatibility the new, very fast ARM processors would have no relevance for us. The announcement is a clear sign that someone is working towards a machine independent operating system.

"RISC OS was originally designed for the ARM2 and ARM3 processors, which had a 26-bit address bus and a combined 24-bit program counter plus 8-bit status flags in register R15. The ARM6 expanded the address bus and

program counter to 32 bits and moved the status flags to a separate register, but included backwards-compatible 26-bit modes to allow ARM2 and ARM3 user programs to run unmodified.

"The latest ARM processors have removed these 26-bit compatibility modes in favour of the new 16-bit "Thumb" architecture. As a result, versions of RISC OS for new processors such as the ARM9, 10 and XScale will be 32-bit only, using only 32-bit modes.

"In the past RISC OS has used only 26-bit modes for backwards compatibility (with the exception of fast interrupt handlers and, in RISC OS 4, the FPEmulator). Indeed, current versions of RISC OS do not support operation in 32-bit modes for general applications or modules. As a result, almost all current RISC OS software is designed to run in a 26-bit mode, and will not function on a 32-bit system.

"The components included here will allow programs to be built so they can run on any system from an ARM2 Archimedes to a future Intel 80200-based platform. This is achieved by creating 26/32-bit neutral code that performs the same when running in either a 26-bit or 32-bit mode."

Which means that you, as a user of a RISC OS machine, don't need to

do anything — except note that the first step has been taken to ensure that new RISC OS machines will be able to use the new processors such as XScale (Intel's name for the new StrongARM processors). The statement from RISC OS / Pace helps make sense of last month's announcement from Mico about the expansion possibilities of the Omega and RiscStation's decision to wait for hardware independence for the release of their Evolution.

One software developer, Mike Glover of Icon Technology, was able to confirm that they had got a call from Pace at the end of October to ask if they (Icon) could build a version of *EasiWriter* that would work on a 32-bit RISC OS. Pace provided the necessary 32-bit libraries and Bob Pollard (Icon's software writer) was able to deliver a working 32-bit clean version within two days.

Of course Icon have not seen it working on a 32-bit device but the news that such an important piece of software can jump this first hurdle is excellent. Icon has also confirmed that the test build of *EasiWriter* works on the current RISC OS.

Don't hold your breath but we're on our way...

RISC OS Ltd - www.riscos.com



RISC OS 32-bit software forward compatibility release

RISCOS Ltd and Pace Micro Technology plc have today released a beta version of the components required for users of the Acorn C/C++ development environment to produce RISC OS programs that will be compatible with

Big publishers pack

The company that is developing *Vantage* has been remarkably busy recently. As well as releasing the latest version (0.97c) of *Vantage* they have also produced the

Cerilica Publishing Pack which is being sold on-line for £19.95. Customers who paid for *Vantage* early have received the Publishing Pack free.

In addition Cerilica have released a major upgrade of *RiScript* (to v 4.10) which now automatically produces Type 1 font

conversion and



Monitor TrueSep DotGain

embedding into PDFs.

As if all this wasn't enough they have also announced that they have taken over the publishing rights for *TopModel* and will be enhancing the software,

releasing the long-awaited *TopBones* as a plug-in, bundling more options and reducing the price.

Top Model is the premier 3D design and publishing package that was originally published by Spacetechn Ltd.

There will be a full launch of the product in the new year when Cerilica will also be giving details of support and upgrade options for existing *TopModel* users.

To make sure that you get the message Cerilica has produced a completely new Web site at www.cerilica.com

Cerilica, PO Box 40, Ross-on-Wye, HR9 7WH 0870 2411731

ROSES by another name

It's not those things that grow rampant in your garden because they attack you every time you attempt to wield a pair of secateurs or a reference to a chocolate reward. ROSES stands for RISC OS Education Resources. ROSES is a creation of the RISC OS Users' Group of London (ROUGOL). Following ROUGOL's creation of the RISC OS Education Mailing List, a proposal was made to create a pool of RISC OS resources useful in education, to be available on the internet.

The RISC OS Education Resources Web site (ROSES) contains files in Impression, Textease, Draw, Pipedream, EasiWriter, Ovation and other formats, for use in education. These files include worksheets, handouts, posters, magazine templates, and much more. They cover a wide range of subject areas, and are divided up into Key Stage areas and more general resources (for those not familiar with Key Stages, the site FAQ explains roughly where each is applicable).

These resources are freely available for use in education thanks to the generous support of the RISC OS users who have donated them. So, if you're involved in education and use RISC OS, do have a good look round the Web site,

and you're sure to find something of use! The pool of resources continues to grow, and if you have similar resources that might be useful to others, your material would be very welcome too.

Teachers on the general teaching newsgroups are constantly asking for links to resources and here is one resource from within the RISC OS community and a resource well worth everyone's support. You can check out the Web site for detailed instructions on how to send in files. RISC OS Education Resources can be found at <http://rougol.jellybaby.net/taught.html>

If you're using RISC OS in education, but aren't already a member of the RISC OS Education Mailing List, you can find details at <http://rougol.jellybaby.net/teach.html>

Future developments may include specific teaching software, freeware and shareware. The latter depends on how well used the site becomes. Continued submissions are essential. New items: A-level Physics is gradually being added to. Anyone wanting to submit A-level resources can now do so. Those who have submitted to date were sent free tickets to the RISC OS 2000 Show, for example.

Stay connected

The other person known to have been working on a family tree program is Paul Vigay. Paul works for Argonet who had been providing support for users of the *ANT Internet Suite*. As we reported last month, ANT are concentrating on other markets though Paul is still offering personal support for ANT users. In addition he is rumoured to be developing a couple of major new products.

The news from ANT would have been a heavy blow some time ago when it was undoubtedly the best RISC OS internet suite. Since then the options have opened up with browser offerings from Castle (*Oregano*) and R-Comp (*WebsterXL*). Both have problems but both are being actively developed and have improved substantially since they were first introduced.

A new version of *WebsterXL* (version 1.97) is being issued to existing customers. In addition to minor enhancements the new version includes text highlighting system so that you can mark sections of web pages for cut/paste via the global clipboard. Selections can also be dragged out, which allows drag'n'drop into most applications. The highlighting system is able to cope with tables, forms etc. so that you can quickly and easily pull information from Web pages for inclusion in your own documents.

Perhaps the biggest criticism of RISC OS systems in the past has been the difficulty in initially setting up an Internet link. RComp's *DialUp* application has made that criticism redundant and another major update has just been released and issued to users.

Version 1.35 introduces a QuickFetch system for mail, news or mail&news.

This logs on to the selected account, fetches mail/news, then disconnects. The user is given the option to stay online if they wish. A second improvement is Idle disconnect where after a definable period of inactivity, *DialUp* will optionally disconnect. The user is warned when disconnection is approaching, and given the option to stay online.

If you have a non-standard modem you may need an easier modem init string config. R-Comp say they wish it wasn't necessary, and in most cases it isn't, but every so often they come across someone with such a modem and it is now possible to sort this in a friendly dialogue box.

Perhaps the most frequent complaint about *DialUp* was the lack of a modem volume control. Those concerned by the negative feedback from spouses when connecting to the Net at 2:00am will be relieved to learn that the volume of the modem's beeps and whistles can now be set.

No matter how good an application it's important that those items obvious to the designer (but often not so clear to we users) are clearly explained at the point of use. *DialUp* now has support for interactive help and windows now have help on buttons, boxes, sliders and so on. The software still has much "in window" help and examples, but this extends the help available.

RComp (01925 755043) www.rcomp.co.uk/
22 Robert Moffat, High Legh,
Knutsford WA16 6PS

In brief

SouthWest Show

Don't miss out on a visit to the RISCOS South West Show once again at the Webbington Hotel, Loxton nr Axbridge, North Somerset (a few miles south of Bristol on the M5) on 10th February 2001 with a free bus shuttle from Weston-Super-Mare. Just £2.50 entry (£1.50 to ARM Club, Foundation members).

Theatre programme, show discounts, games area and software to be won — make a date and make sure you come.

Getting the picture

Kodak has slowly been replacing its high quality PhotoCD system with their inferior PictureDisk format. They are both systems that include your standard photographs on a CD for use in a computer.

The former, which worked well with RISC OS systems and included high quality images has now been discontinued in favour of the latter which is easier to use on a PC.

The good news is that Boots intend to produce their own PhotoCD system which should be available in the near future. We'll let you know when we've had chance to test the Boots version.

ASM

If you are fully familiar with ARM assembly language but have somehow missed the recent announcement from Tigger (Nick Roberts) you may be pleased to note that a new version of ASM is available with a new qualifier — APCS provided to allow generation of code to be linked with APCS-32 code and a new pragma 'A' used to control whether ASM should perform 26-bit vs 32-bit architecture checking.

If you don't understand

Finding your roots

An even newer program was mentioned last month on the Graphics page. *Roots* by Alex Waugh has been upgraded since then to version 1.10 taking into account feedback from early users. *Roots* is a program that allows input of details of members of a family and produces a tree of the family.

Since the death of Graham Crow (Author of *Ancestry I*) we have been looking for an application that would take the place of the one Graham was proposing to write. David Holden has produced *Ancestor+* (now at version 1.52)

that produces output in HTML format and now *Roots* produces an impressive Drawfile image. Both programs can export GEDCOM files (the standard family tree format) and *Roots* can import these too.

The latest version of *Roots* has a completely new format for its graphic styles. These are written in Lua which has allowed enhanced flexibility. Although the graphic styles can be amended by the user (there are 12 predefined options) they are not yet in a user-friendly version and Alex is hoping to be able to produce a proper user interface. www.ecs.soton.ac.uk/~ajw498/

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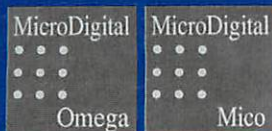
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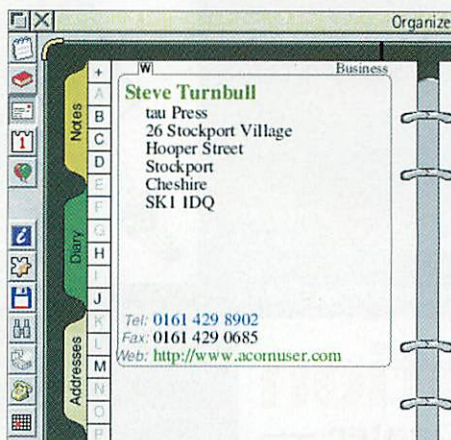
There's a new release due soon from Chris Morison, author of one of the latest 'must-have' pieces of software. Chris has developed his alternative to *Alarm* into a fully fledged *Organizer*. The product, incorporating calendar, Diary, Addresses, Anniversary and Notes sections, has gone from strength to strength with rave comments from those who use it.

Chris will soon be releasing version 1.55 but this time there will be another shareware application complementing *Organizer*. *Rosetta*, from Timothy Atherton, will perform conversions between *Organizer* and Psion 3 machines (series 5 and 7 machine conversion is to be added later).

Version 1.55 of *Organizer* will be sent to registered users of v1.50 free of charge and, in addition to the Psion synchronisation, will allow separate home/work address and phone details per address-book entry and also

completely user-definable fields in the address-book. *Organizer* is available at £10 (for download by Internet; add £1 to receive the software by post) and can be ordered securely on-line by credit card.

Organizer www.organizer.morison.net



Wakefield 2001

Given the state of the RISC OS market, organising a major show is, at best, a 'Risky' business. Fortunately we in Wakefield get away to a flying start in that the Epsom show was a great success with large and enthusiastic crowds on both days.

Wakefield 2000 was an interesting show, new hardware was there in quantity and much of it was purchased, but where was the new software to run on these machines?

At last there are signs, small signs, but signs nevertheless, that the essential software is beginning to surface. Not only is the very long awaited 'Vantage' virtually complete, but thanks to Martin Würthner the old stager 'ArtWorks' is getting a new lease of life. Icon's excellent *Easi/TechWriter* series are being joined by the CD Version of David Pilling's 'Ovation Pro', not to mention the brilliant 'Textease' Studio. Even 'Top Model' is getting the Cerilica treatment — improve the program and halve the price!

Even in that most neglected sector of the basic office programs, the spreadsheet, there are positive signs. While 'Eureka' and 'Schema' are getting

longer in the tooth, there are now new versions of 'Pipedream' and 'Fireworkz' as well as the brand new 'Textease Spreadsheet'. Not only that, active development of these three packages goes on.

Internet access remains probably the most lacking aspect of RISC OS, but even here R-Comp and Castle are actively developing browsers, connection software and Web editing applications.

In planning Wakefield 2001 we have been favoured by attracting sponsorship from Acorn User, Castle Technology, Cerilica, Photodesk, R-Comp and RiscStation.

Because of the traumas of the past three years quite a lot of previous exhibitors have gone to the wall so familiar names will be missing. At the same time new developers are beginning to appear and from where I'm sitting, I predict that Wakefield 2001 is going to be an even greater success than last year.

For more details see the WACG Advert in this issue, or look at the show Web site: www.wacg.org.uk/show

In brief

that sentence, don't worry — ASM is obviously not designed for you!

New e-ddress

Clares are the publishers of *Composition*, *ProArtisan*, *Rhapsody*, *Plot*, *NightSky* & etc. For a number of years now, their email address has been of the form

someone@claresmicro.com

This will continue to be the case. However, it has also been possible to email them at addresses of the form

someone@clares.demon.co.uk

This will cease to be the case at about the time you receive this magazine so if you have the old form of the address in your address book, please update it to the new one.

Santa's skin (yuck!)

For those of you using the Digital CD application you might wish to download a special 'skin' for Christmas. There is a whole new batch of skins on skins.org and one of them is a special for Christmas — and aptly named 'Christmas'.

www.skins.org/skins.php3?area=digitalcd

New address

Really Good Software Company (RGSC), publishers of the excellent *NoticeBoard Professional*, *Picture Book 2* and the *Montage* fractal program have recently moved.

They're still in Harpenden but if you want to order any of their software you should now post your orders and cheques to: 8 Hawthorn Close, Harpenden, Herts AL5 1HN.

The phone number is unchanged and e-mail is still sales.rgsc@argonet.co.uk

Contacting AU

news@acornuser.com
John Cartmell

Interactive !Draw Tutorial

A new CD from APDL written by Tom Beeley

!Draw is a very powerful program, but the manual supplied with the computer is not very helpful. This CD is a comprehensive tutorial, with lots of example Drawfiles for you to practice on. You can either treat it as a step by step tutorial, and there's even a checklist for you to tick off each lesson, or just 'browse' and learn about the things that interest you.

£14.50

Easy C++

Low cost desktop C++ compiler previously sold by BEEBUG. Now on CD with Manual and Tutorial. Printed manuals are available at extra cost. Includes modifications to work with RISC-OS 4, !EasyDebug and Library source code

£29

ProAction APDL

Manual **£20**

The new APDL Turbo Processor upgrade

Prices include VAT and assume that you have an appropriate Strong ARM processor in good working order to exchange. Please add £3.50 UK carriage.

The Turbo processor upgrade is a part exchange processor for any Strong ARM Risc PC. It has a boosted clock rate and other additions to increase speed. This method of improving performance has been widely used by enthusiasts, and the Turbo 287 can give a speed increase of between 15 and 30 percent depending on the type of program being run.

Most users are naturally apprehensive about carrying out this type of work. It is possible that the processor could be damaged, as not all will work reliably at high speed, leaving you with a dead computer and a bill for a new Strong ARM. The APDL Turbo upgrade removes the uncertainty of running a fast processor, and is guaranteed for 1 year so there's no risk.

Upgrade prices

Turbo 257	- 257 Mhz upgrade from S/ARM 202 Mhz	£29
Turbo 275	- 275 Mhz upgrade from S/ARM 202 or 233 Mhz	£39
Turbo 287	- 287 Mhz upgrade from S/ARM 202 Mhz or 233 Mhz	£49
New - Turbo 276-T	- 276 Mhz Revision T from 202 or 233 Mhz S/ARM	£149

3.5" IDE Hard Discs	Drive	+ i/face
2.1 Gb	£59	£106
4.2 Gb	£66	£113
6.3 Gb	£73	£120
8.2 Gb	£76	£123
13.4 Gb 7200	£84	£131
15 Gb	£84	£131
16.8 Gb	£89	£136
20 Gb 5400	£96	£143
20 Gb 7200	£116	£163
30 Gb 5400	£117	£164
30 Gb 7200	£141	£188
18.8 Gb 5 1/4"	£99	£146

Other sizes available
'Plus i/face' price includes an APDL fast IDE interface

Blitz

ideA

Lightning fast IDE interface for your Risc PC. All the features of our normal fast interface but up to 7 Mb/sec Only £119 or just £109 when purchased with a drive.

2.5" IDE Hard Discs	A3020	3000/3010
120 Mb	£44	£94
170 Mb	£54	£104
210 Mb	£59	£109
330 Mb	£69	£119
420 Mb	£73	£123
1.8 Gb	£79	£129

A3020 includes fitting kit, 3010/3000 includes APDL IDE i/face

Special offer - A3000/A3010
120Mb - £44 1.8Gb - £84
Price includes interface

IDE CD ROM drives	Internal	External
44x	£38	£144
48/50x	£41	£147

Add just £47 to Internal price for an APDL fast IDE interface. External price includes an IDE interface for any type of machine

CD Writers
8x4x32x with CDBurn and media. Best used with one of our IDE interfaces - **£199**

SCSI drives		
210 Mb		£25
420 Mb	h/h	£39
4.2 Gb	h/h	£109
4.2 Gb	1" high	£127

PD, Shareware and low cost hardware and software for Acorn computers

APDL

As well as all this we have thousands of discs of PD and Shareware and around 500 discs of Acorn format clip art. For a full catalogue send 50P or two 1st class stamps



All prices include VAT and UK carriage except hard drives add £6 for internal drives, £8 external



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APDL Public Domain and other CDs

APDL PD-1	£12.50	Over .800 programs and utilities. No games, clip art, music, etc.
APDL PD-2	£12.50	Over 700 games, novelties, cheats, demos, sound, music, etc.
DTP-1, DTP-2	£7.90	Each has over 500 Mb of clip art, ready to use in Acorn format
DTP-3	£12.50	Highly acclaimed clip art CD with more than 720 Mb.
DTP-4	£14.90	Latest clip art CD with around 13,000 files. Great for schools!
Publish Art '98	£7.90	Thousands of pieces of clip art and web images, by Smart DTP
Fantasy Pictures	£7.90	By request, from the Fantasy section of the APDL catalogue
The Gafix CD	£7.90	1000's of pictures, backgrounds, buttons, and much more
Best Games 1	£7.90	20 of the best PD games ready to play direct from the CD
Best Games 2	£7.90	Games 1 was so popular we've done it again. 20 more games.
Best Games 3	£7.90	Yet another great compilation with 25 of the best games.
Skullsoft collection	£9.90	Great budget price games CD with !Arya, !Xenocide and !Plig
Soft Rock collection	£9.90	Six classic games by Soft Rock, plus a new version of !Trellis
Ergane	£7.90	Translating dictionary for over 50 languages by David O'Shea.
Earth Data	£9.90	Geographical database with lots of statistics, plus !Earthmap
Earth in Space	£9.90	Pictures, databases, a huge amount of information about the solar system and galaxy at a sensible price
Wizard Apprentice	£7.90	Highly acclaimed multi-level game. Risc PC only.
Education Resources	£12.50	A CD especially for schools. More than 300 useful programs, over 5,000 specially selected clip art files, hundreds of classic novels, multi-media, educational games and lots more.

APDL ideA fast IDE interface

- No complicated setting up. It's self-configuring so just plug it in!
- Uses DMA on Risc PC. Over twice as fast as the built in IDE interface.
- Includes CDFS and ATAPI CD drivers for many popular CD ROMs.
- Four devices, any combination of CDs and hard drives.
- Up to 8 partitions, so you can have large drives on pre RO 3.6 machines
- Software in flash EEPROM for easy update.
- Connectors are available for external drives or CD ROMs
- Fits A310, A400, A5000, A540, A7000 and any RiscPC.
- You can now use CDR or CDR/W drives with !CDBurn. No need for expensive SCSI interfaces and CD drives!

All these features for the incredible price of just £52
A version for A3000, A4000, A3010 or A3020 is available for **£62**



DataSAFE

Data Safe - A new concept in backup and data security

DataSafe consists of an external case to hold a 3.5" IDE drive, connected to your machine's printer port. This gives a large capacity portable drive, movable between machines and locations. Ideal for backup, secure data storage and transport. All the features of our ideA card, partitioning, passwords, etc. Great for schools. Supply your own drive or we'll fit one for you. Prices start at **£99** or with 10 Gb drive **£178** or 16.8 Gb **£189**

DataSafe is highly praised, but there's been one criticism. People would like it smaller and lighter so carrying between home and office (or school) is even easier. So we've introduced the DataSafe 'mini'. With all the features of the standard version, this uses a 2.5" drive so it's very small, about 5" by 5" and less than 2" high, and weighing only about 14 ounces! Prices start at **£99** without a drive or with a 1.8 Gb drive just **£169**

Datafile CDs

PD CD-3	£4.50
PD CD-4	£4.50
PD CD-5	£4.50

Software

Faster PC	
The XT PC emulator that works on any machine with 2Mb	£20
Powerbase	
Great database. Does everything most people will ever need at a sensible price	£15
Menubar	
Superior pull-down menu system with lots of features	£15
Tiger	
Long filenames and more	£15
Worktop	
Switch between 30 desktops with a single mouse click	£15
Locus	
Powerful but very easy to use mathematical graph and analysis tool. Ideal for schools.	£18

RiscPC RAM

8 Mb	£9
16 Mb	£26
32 Mb	EDO £47
32 Mb	FP £49
64 Mb	EDO £69
64 Mb	FP £79
128 Mb	from £139
2 Mb VRAM	£72
1 to 2Mb VRAM exch.	£49

Fast SCSI interface

Connect 32 SCSI. Up to 7Mb/sec Limited number at only **£75**

Ancestor+

The program for family historians and genealogists. Very easy to use. Imports !Ancestry 1 and II, !Family, CSV and GEDCOM and exports as GEDCOM or CSV. Can save as cross referenced HTML, with pictures, so you can pass data on to people who have a computer but no genealogy software, or upload to your web site. Powerful and flexible reporting and searching. Unlimited information storage, you aren't restricted to a few lines of text and a picture.

Ancestor+ is based on the program that Graham Crow was working on at the time of his death, which was a development of his original Ancestry. Price just **£59**
Upgrades from Ancestor 1 and Ancestor II available

Scenario

You've got a network. You've got a variety of different computers which you want to use. You require effective Internet and intranet access. You want consistency, reliability and performance. You need ease of use and management.

Take Control of Your Network

One Server

Solution

The NetManager is a powerful, expandable server which offers high performance, yet is easy to manage and is low in cost. It's flexible nature allows it to fit in with the majority of networks be they NC, PC, Acorn or Mac based. Using the absolute industry standard software used by the majority of Internet services worldwide, you can be certain of its reliability and compatibility.

- Use with any platform
- Low cost (no licences to buy)
- More cost-effective and easier to use than Windows NT
- Remote administration

Internet/Intranet

The NetManager provides transparent Internet access to all the machines on your network even if you only have a modem. It offers email services that integrate with Microsoft® Outlook Express, ANT Marcel® and most other mail clients. Alternatively, the easy-to-use web-based email service offers consistent email access to any machine that is running a tables-capable browser.

The NetManager acts a web proxy for your workstations and also has full web-serving capabilities to allow you to build an effective local intranet. Server management is mainly web-based meaning you can use any web-enabled computer to add, edit and delete users, configure email and Internet services. You can set up mailing lists, aliases and even discussion groups.

- Web-based user management
- Web-based e-mail service with
- URL blocking capability
- E-Mail content filtering
- Absolute industry standard (POP3, IMAP4, SMTP, HTTP, FTP)
- Modem, ISDN TA or routed access to Internet
- Transparent dial-on-demand Internet access

File/Print Serving

The NetManager can serve PCs as though it was an NT server, MacOS computers as though it was an AppleShare server, RISC OS computers as a Level 4 server and also Network Computers/Thin clients. The simple user management and high performance makes it ideal for networks of all sizes. Creating a user is as simple as entering their name and password; you don't need to manually create shares, volumes or set permissions unlike with other servers. In the same way, the NetManager will act as print server to PC, NC, Acorn and MacOS computers on your network. Print queue management and printer configuration is web-based for ease of use.





E-Mail

Full IMAP4.1, POP3, SMTP server. Includes web-based email (including addressbooks, attachments, etc.) configurable on a per-user or per-group basis. Content filtering of inbound and outbound mail. Spam filtering and access control list.



NAT

Gives machines internally transparent secure access to the outside world for things like streaming and video conferencing. Port redirection allows internal services to be mapped to the outside world.

Many Uses



Printing

Print sharing for Acorns, NCs, PCs and Macs to either local or network printers. Web-based queue management and configuration.



Fax

Send faxes simply by printing to a shared printer from any platform.



Proxying

Cache web pages locally to speed up Internet access.



Users

Have an unlimited number of users each with their own email and user area.



Internet

Connect to the Internet with ISDN, modems or a router. Dial-on-demand gives transparent access.



WWW

Full web-server that can serve pages internally and externally including web technologies such as PHP, SQL, cgi-bin, perl.



Windows

Serve printers, CDs and home areas to Windows computers as though it was an NT server, but without the licence cost or management overheads. Fits in neatly with existing NT networks.



Security

Full kernel level firewalling to define exactly what machine can access what.



Intranet

Each user can have their own personal web pages.



MacOS

Serve printers and home areas to MacOS computers as though it was an AppleShare server.



Storage

Personal home areas and shared resources. With your choice of tape backup.



Management

Simple web-based and menu-driven management of users, printers, network configurations, Internet access, etc.

UK Sales



Address: Precedence Technologies Ltd
86 Kings Hedges Road
Cambridge
CB4 2PA

Tel: +44 (0)1223 562500

Fax: +44 (0)1223 563522

E-Mail: sales@precedence.co.uk

WWW: http://www.precedence.co.uk

Southern Area Sales



Address: Surftec Ltd
Glen Road
Beacon Hill
Hindhead
Surrey
GU26 6QE

Tel: +44 (0)1428 608121

Fax: +44 (0)1428 608123

E-Mail: sales@surftec.com

WWW: http://www.surftec.com

Pricing

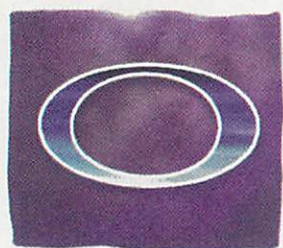
Prices include server hardware, typically Pentium III UNIX Server with 10GB HDD, 64MB Memory and 10/100mbps network card and come ready installed with NetManager software.

Web Proxy/E-Mail Server: £1,199

+ File/Print Server: £1,399

+ NC and NCWorks suite: £1,999

Prices exclude VAT



OVATION

Pro

**New version
2.60 on CD**

Desktop Publishing for RISC OS

Supplied on CD

- Completely revised and reformatted versions of all the Ovation Pro manuals as Ovation Pro documents.
- 20 iSV Fonts
- A collection of almost all the available Ovation Pro resources, applets and dictionaries
- Archive of the Ovation Pro mailing list.
- Example documents and tutorials.

New Features

- Auto paragraph numbering and bulleting
- Impression document loader (i.e. complete Impression documents can be loaded including frames, pictures, chapters)
- Referenced and Proxy pictures to handle large images.
- Mail merge with pictures.
- EPS (including DCS) support
- Graduated, patterned and hatched fills

Standard Features

- 60,000 Word spell check
- 20,000 word thesaurus
- Definable multi-row button bar
- Instant highlight of misspelt words
- Irregular frames with Bézier curves
- Multi-step Undo and Redo
- Automatic drop capitals
- Justification with letter spacing
- Multi column frames
- Frames with skew and rounded corners
- Auto flow round irregular graphics
- Macro handling and script language
- Colour separations and image processing
- Copy and paste chapters
- RISC OS 4 compatible
- Dozens of extension applets
- User definable imposition/print formats.

Prices

- Ovation Pro - £150
- Upgrade from older versions to 2.60 - £35. Please quote your serial number (printed inside the Ovation Pro manual) and the address at which it was registered.
- Prices include VAT and Air Mail (where appropriate).

The Future

Because Ovation Pro is written entirely in C it is trivial to produce copies that will run on the 32 bit version of RISC OS which will be used with new computers and processors. Now it can load Impression documents, Ovation Pro is the future of DTP for RISC OS.

ANT Suite squished

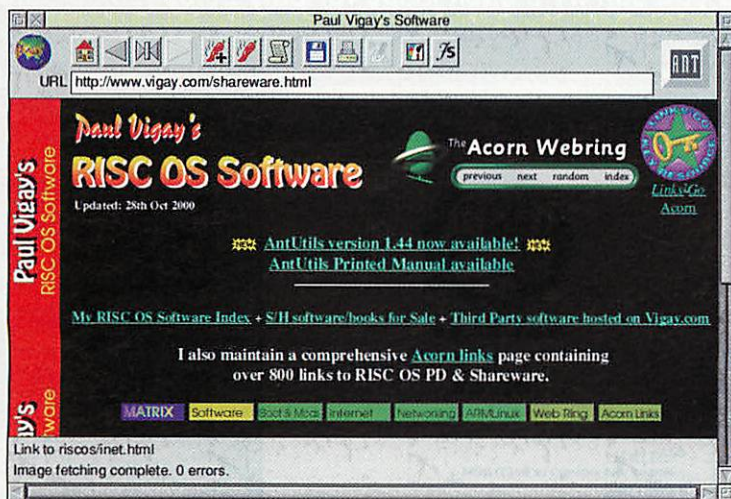
The Bug's life is finally over. Since their two industry-funded leaps into the embedded communication appliance market in August 1999 and September 2000 totalling around £6m, *ANT Limited* have thrown off their humble RISC OS beginnings and are aiming for the top of the heap.

From 30th November 2000 *ANT Limited* and their agents *ArgoNet* are no longer developing or supporting the *ANT Internet Suite* or any *ANT* software products. After that date, support will only be available from the *Argonet* Web site at www.argonet.co.uk/ant/. However this may not be quite the dead end yet for RISC OS users as we shall see, but other players like *Oregon Networks* are waiting in the wings.

Take a look at *ANT Limited's* new Web site with a PC browser and you're forced to look at it their way, with no navigation buttons. Fortunately, the last version of the RISC OS *Fresco* browser with Javascript (v2.13) ignores this directive and leaves you in control.

All the more irksome for Acorn and RISC OS users is that although the abandonment of the *ANT Internet Suite* is the end of the leaf trail for us, *ANT's* flagship browser *Fresco* is actually their leading edge core technology product that features in almost every new *ANT* press release, and just think what *we* could have had.

"It took Amino a matter of days to customise *Fresco* to implement graphics overlays and run a video within the browser. It's rare to find a software company that promises so much and is able to deliver on that promise," gushes a recent



Web site of Paul Vigay OBE (Original Bugfixer Extraordinaire)

Amino Communications press release about *ANT Limited*. RISC OS *Fresco* owners would have given an ARM and probably a THUMB for the delivery of any new implementation of anything in the last two years.

The redoubtable Paul Vigay, who has done much to keep users' faith in *ANT* products and *Fresco* in particular, both as *Argo* support representative and on his own initiative, plans an independent support scheme. Paul already has been working hard on bug-fixing and add-on programs to keep *ANT* users going, such as *AntUtils*, *FresUtils*, *NewsDate*, *ChangeISP*, *MBRepair*; the list goes on.

AntUtils adds useful extra facilities to the *ANT Suite*, such as timed e-mail and news fetching, random e-mail footer quotes, *Fresco* cookie and browser plug-in control, which also form part of the separately available *FresUtils*. *NewsDate* fixes the *Marcel* Y2K bug affecting news fetching, and *ChangeISP* allows you to easily access up to 25 different ISPs from a single copy of the *ANT Suite*. Paul has additional pages for users who register his shareware offerings.

Paul's plethora of plug-ins illustrates the sad lack of *ANT* activity in development on our preferred platform. Perhaps a better epitaph for the RISC OS bug's life of the *ANT* organisation would be "the software company that promised so much but fixed so little".

Paul Vigay's RISC OS Software
www.vigay.com/riscos/apps/antutils.html
 ANT Limited
www.antlimited.com/ANT/indexb.htm

In brief

Free French ISP

Access to L'Internet is complètement libre with *Proxad's* free ISP in France. You get unlimited e-mail addresses, read-by-Web mail, POP3, IMAP4 or even *Minitel*. Plus 100Mb Web space, unrestricted news-groups and local call access in most areas of France at V90 and up to 128k ISDN and above. *Proxad* can supply connection software for PC and MAC, but other operating systems are acceptable, including Linux, FreeBSD and — *Sacré Bleu*, it gets a mention — RISC OS!

Cliquez ici to find out more
www.free.fr

Surf to Arcade

Arcade BBS now has full Internet access every evening and all weekend via *SurfTime* and *Demon Internet*. *Arcade SurfTime* runs from 18:30 to midnight every weekday and from 08:00 to midnight on Saturdays and Sundays. The *Arcade BBS* filebase is a valuable archive of both legacy and current RISC OS software, with thousands of downloads available from the on-site Web and FTP servers. You can also log in by telnet to chat, read e-mail and retrieve mail and news by FTP. The downloadable *Arcade* telnet block driver enables any RISC OS terminal to log on.

Arcade BBS
<http://arcade.demon.co.uk>
 telnet://arcade.demon.co.uk

RISC OS Branded

Michael Stubbs is offering free RISC OS-branded Web addresses to software authors to support and promote the platform. Popular applications like *AcornICQ*, *DigitalCD* and *Zap* now have Web site addresses in the riscos.org.uk domain registered by Michael. For full info contact webmaster@riscos.org.uk

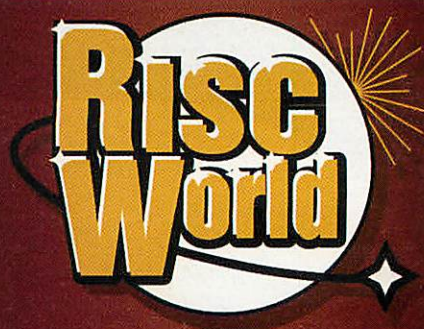
Contacting me

David Dade:
comms@acornuser.com

RISCWorld, the bi-monthly CD magazine for RISC OS Users

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or only £19.90 outside the UK



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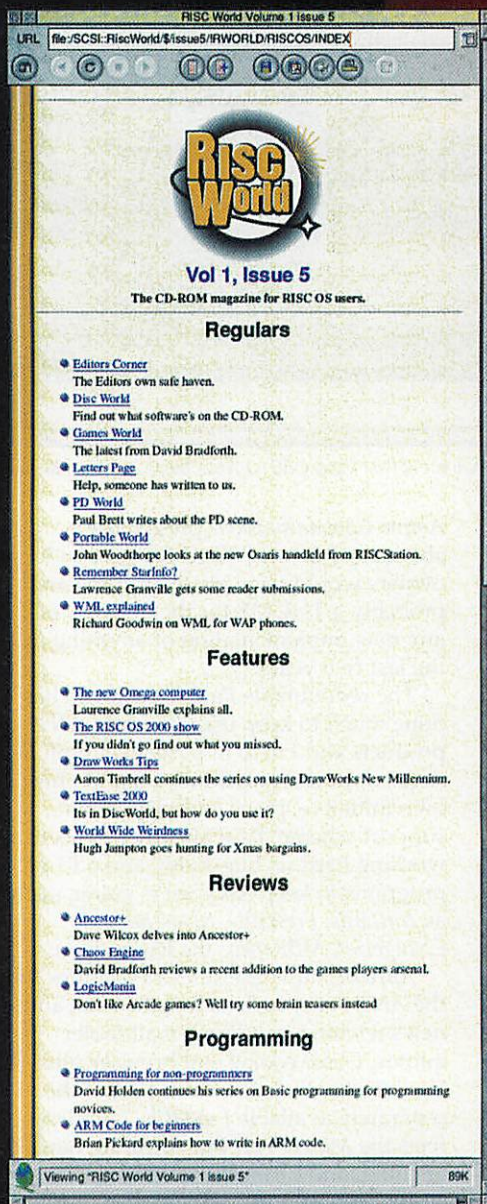
If you haven't subscribed then this is some of what you have missed over the last 5 issues....

- Complete time limited version of Textease Studio (including file saving) as well as an introduction to using the package.
- Complete time limited version of DrawWorks New Millennium (including file saving).
- A new full version of HTML³ the HTML authoring package.
- Demos of the latest and greatest games including The Chaos Engine, Destiny, Wizards apprentice, Spheres of Chaos and many more.
- Full contents of the comp.sys.acorn.announce newsgroups.
- DTP tips including how to get the best out of the TeX typesetting language, brochure design with Ovation PRO and DrawWorks Revealed.
- Hardware reviews, including the Kinetic Risc PC upgrade, the APDL Turbo card and more.
- Sneak previews of new computers, RISCWorld often manages to print full reviews before other magazines have even previewed machines.
- Making websites for use with WAP mobile phones.
- Reviews of lots of new or updated software products, including EFF CD2, Anagram genus, Ancestor+, DrawWorks Millennium, RiScript PRO, RISC User in a Nutshell, the RISC OS Ltd PRM CD, PsiRisc, Hard Disc Companion, CD-Burn, ArcLink5 and many more.
- In depth show reports from our roving reporters including coverage of RISC OS 2000 and Wakefield 2000.
- Features on leading companies such as Castle Technology and Warm Silence Software.
- In depth articles on RISC OS 4, AWK, the Concurrent version System Tool, HTML, BASIC and more.
- 5 CDs with only the best software and articles often with exclusive items you will not get anywhere else.

You won't find articles on Linux, hardware that doesn't work under RISC OS or PC software unrelated to RISC OS.

You will find the best authors, the best software, full commercial products and more.

RISC World is the magazine for RISC OS users, perhaps you ought to find out why?



RISCWorld regular articles include

DrawWorks Revealed
A complete series (started in issue 4) showing exactly how to get the best out of DrawWorks. Issue 5 even includes a fully working time limited version of DrawWorks New Millennium for you to try.

HTML & Website design
A comprehensive guide to writing HTML covering one particular topic every issue.

ARM Code of Beginners
How to write in ARM code explained right from the very first steps.

BASIC Programming
An easy to follow guide to writing your own programs.

Portable World
The complete roundup of news on Portable computers, including exclusives on the RISCStation portable and the Osaris handheld.

Games World
The best source for information on the latest games, and we always supply playable demos.

PD World
All the latest PD, shareware and freeware software, and of course it's all on the CD for you to try.

Reviews
Whenever we review a product we will include a demonstration version for you to try. Issue 5 includes TextEase Studio, Spheres of Chaos and The Chaos Engine.

WWW Links
A complete set of interesting, informative, useful or just downright odd links for your enjoyment.

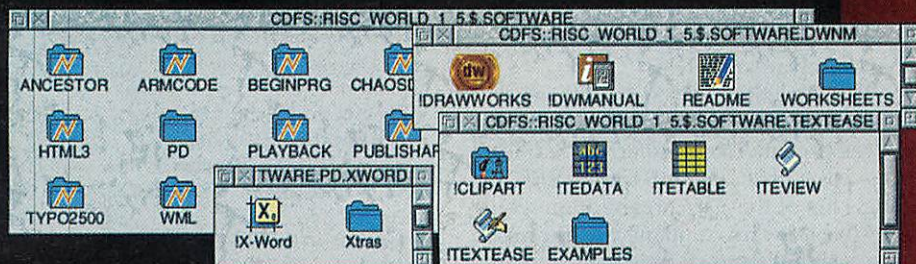
StarProg
Our own homage to the much missed Acorn User series StarInfo. Includes submissions from readers and the RISC World editorial staff.

Adverts
Adverts from some of the best known companies in the RISC OS arena, often with special RISC World readers offers.

Comment
RISC World authors know what is really going on in the RISC OS community, shouldn't you? Have you got something to say, then contact us. Unlike some magazines RISC World pays its contributors.

And more.....
Every issue of RISCWorld is packed with more, more reviews, more articles, more free software and RISC World is written by some of the most experienced authors in the RISC OS community.

Still not subscribed? Well you are going to miss out on a whole lot more. Indeed if you miss issue 6 you may never forgive yourself!



RISC World Magazine

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subscriptions@riscworld.com

RISCWorld is published by APDL and edited by Aaron Timbrell & David Bradforth *From issue 4 we are including full commercial products on every issue

Accounting for it

This time of year is generally one that sees the bank account take a bashing. If you didn't spend all your money at the RISC OS Midlands Show in December, you'll probably have used some over the ensuing festive season!

Enter some help organise your bank account with the aid of Stephen Murphy's new RISC OS home

accounts application. Just released, it's quite basic as it currently stands, but boasts an ambitious 'things to do' list.

On the list so far are monthly statements, printing, file exports in a variety of formats, standing orders and payments, account details section, toolbar icons, configurable settings and a number of other

Easy Accounts: Main Window

Add Amend Delete			Help Save	
Date	Transaction description	Cr/Db	Value	Balance
03/12/2000	Balance brought forward	Cr	500.00	500.00
04/12/2000	Petrol	Db	12.50	487.50
04/12/2000	Rent	Db	100.00	387.50
05/12/2000	Cheque from Mark	Cr	24.00	411.50
06/12/2000	Visa card	Db	132.78	278.72
07/12/2000	Phone bill	Cr	56.89	335.61
07/12/2000	Christmas crackers	Db	12.89	322.71
09/12/2000	Petrol	Db	15.00	307.71
11/12/2000	Food	Db	37.56	270.15

handy functions. Stephen also encourages people to offer feedback and other suggestions for future additions.

At present the only facilities are the addition,

deletion and editing of individual entries. A typical week's expenses might be that shown in the accompanying screenshot.

As you can see, the display is clear and uncluttered. Entries can be edited or deleted by highlighting them and clicking on the relevant toolbar icon.

Each entry can be a credit or debit and is added or subtracted respectively to your account balance — which is interactively updated in the rightmost column. At present you can't print your accounts out, but you can save them as a text file, which you could load into a word processor or DTP for subsequent editing or printing if you require.

Although at present *Accounts* is fairly basic, it's simple to use and looks promising, so head over to Stephen's web site at www.stephen.murphy.redhotant.co.uk and give him some encouragement.

Road rave

There seem remarkable few good educational applications available as PD or Shareware, so I like to mention those that I find. This one, by Richard Whincup, is a very nicely put together application for teaching and testing road signs. As such it will be very useful for anyone who is currently awaiting their driving test.

The application consists of three main sections. These are 'View signs', 'Test on signs' and 'Theory test'. Select the area you want to examine and *RoadCode* will either present you with a description of 48 common (and not so common) road signs, test you on how well you recognise them or just ask you general questions relevant to the road theory test.

I decided to opt for the road theory test first. This consists of 24

multiple choice questions on a variety of topics ranging from when it is safe to overtake to testing your knowledge of safe stopping distances. I'm sure some of the questions will catch people out, even experienced drivers. I only managed to score 83% on my first go, and I've been driving for over 10 years!

A running display of the percentage you get correct is displayed, so you always know how well (or bad) you're doing.

When viewing or testing yourself on road sign recognition, there are options to restrict the testing to particular types of sign — such as warning signs or signs giving orders. Again, an interactive display of the percentage correct is given.

As you can see from the accompanying screenshot (from the Sign Test section), multiple choices are offered for each sign displayed.

To enter your answer you simply click on the relevant icon accompanying the answer you believe is correct. As soon as you select an answer, the correct answer is highlighted in red and your ongoing score is updated. You can then proceed to the next sign. I managed to score a more respectable 100% on this test.

RoadCode is available to download from Richard's Web site at www.richie.ukgateway.net/



Your calendar girl?

While browsing around Web sites downloading interesting software to look at in this column I quite often discover interesting nuggets that people have written, lurking away on other parts of their Web sites. *MakeCal* is just such a bonus application I discovered on Stephen Murphy's site. As it's the time of year that you're probably updating your calendars, or simply organising

the New Year ahead, I thought it was timely to mention this small utility.

At the name suggests, it's an application for creating calendars. From it's simple, straightforward window you can select whether you want a complete yearly planner or individual months. If the latter, you can opt for either a landscape or dual-column portrait display. Set which dates you want your planner

for and click 'Save'. *MakeCal* will then produce a Drawfile for the required date period. This can subsequently be dropped into a DTP package for additional design work if you like.

Users of this simple and effective utility will have no excuses for missing those important dates in 2001. Available to download from www.stephen.murphy.redhotant.co.uk

Top Twenty Links: Courtesy of www.riscos.org

No.	Visits	Description
1	33	PortScan - Utility to scan TCP/IP ports, by Herbert zur Nedden [more] Homepage: http://www.rz.tu-ilmnau.de/~jahoo/portscan/index.html Status: ?
2	26	Commandoz - A Panzer General like tanks game., by Rainer Eck [more] Homepage: http://www.geocities.com/schimm12/ Status: ?
3	25	Thumbnail - Handy image previewer, by Ian Palmer [more] Homepage: http://golden.argoet.co.uk/pub/Acorn/PD/Graphics/Thumbnail.spk Status: ?
4	20	PC Engine - PC emulation software, by Paul Clifford [more] Homepage: http://www.plasma.demon.co.uk/pcengine/ Status: Freeware
5	19	Draw2SVG - Convert Draw files into SVG files., by Steven Simpson [more] Homepage: http://www.comp.lancs.ac.uk/computing/users/si/software/draw2svg.html Status: Freeware
6	18	StrongED updated - An updated version of StrongEd, by John Whittington [more] Homepage: http://www.tnpsft.co.uk/stronged/ Status: ?
7	17	Flash - RISC OS Macromedia Flash player, by Leo Smiers [more] Homepage: http://people.a2000.nl/smiers/ Status: ?
8	16	Acornet - A freeware internet suite for RISC OS, including all you need to get online, by Various authors [more] Homepage: http://freenet.barnet.ac.uk/pub/Acorn/acornet/ Status: ?
9	15	Zap - Arguably the best RISC OS text editor (well, it's my favourite!), by Mixed [more] Homepage: http://www.zap.uk.eu.org/ Status: ?
10	14	Thump - Realtime JPEG thumbnail viewer, by Rick Hudson [more] Homepage: http://homepages.dhug.co.nz/~rhudson/software/thump.html Status: ?
11	14	ArcWeb - The best freebie web browser for Acorn machines., by Stewart Brodie [more] Homepage: http://www.ecs.soton.ac.uk/%7Eesb94r/arcweb/ Status: ?
12	14	MPEG2 - Play MPEG/MPEG2 movies, by Peter Teichmann [more] Homepage: http://cswww.srz.tu-dresden.de/~teich-p/asoft.html Status: ?
13	12	Flash - A slightly improved version of Leo's Flash player, by Henrik Pederson. [more] Homepage: http://login.dknet.dk/~henrik/ Status: ?
14	11	POPstar2 - Improved version of POPstar, by Joseph Heenan [more] Homepage: http://www.ping.demon.co.uk/acorn/ Status: ?
15	11	FreeNet - Freeware TCP/IP stack [more] Homepage: http://www.compton.demon.co.uk/freenet/ Status: ?
16	10	AcornICQ - Acorn RISC OS ICQ client, by Angelo Melis [more] Homepage: http://www.vigay.com/riscos/icq/ Status: ?
17	10	CacheFS - Module that lets you browse your 'WebServe' web cache off-line, by David O'Shea [more] Homepage: http://indigo.ie/~koshea/acorn/cachefs.html Status: ?
18	9	DrawScript - A programmable script language for !Draw., by Joe Taylor [more] Homepage: http://drawscript.cjb.net/ Status: Freeware
19	8	RiscFree - A suite of PD applications together forming a fully fledged Internet package. [more] Homepage: http://members.xoom.com/XOOM/rmjagroup/riscfree/ Status: ?
20	8	WavEdit - A disk based WAV format sample editor, by Robert Hancox [more] Homepage: http://www.tothole.freeserve.co.uk/software/wav.htm Status: ?

Repair that JPEG

Here is yet another useful JPEG utility from J. David Barrow and was very efficiently coded in answer to a plea on one of the Acorn newsgroups. There are numerous picture viewers on the PC platform which form self-extracting slideshow type displays. Although usually comprising standard JPEG images, they have an additional PC loader and header which confuses RISC OS JPEG viewers — until now that is.

Jack will 'repair' JPEGs where up to the first 150 bytes of the header have become corrupt. This is very useful for stripping off the PC only portion at the top of the file, and locating the real image embedded later on.

Jack should be capable of extracting JPEG images from most PC files with the suffix .wbz or .fcgi and as such makes a useful addition to J. David Barrow's growing collection of JPEG utilities such as *JSplit* and *JSplit* (mentioned in previous PD columns).

It is also capable of extracting JPEGs from a selection of files dragged to it's icon, each of which will be processed one after the other.

Jack is available to download from www.dacha.freeuk.com

Contacting AU

Paul Vigay:
pdpag@acornuser.com

Omega



simply awesome

MicroDigital

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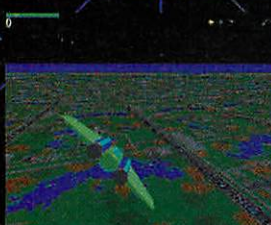
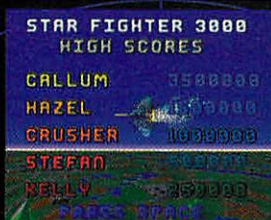
Omega computer is designed and manufactured by MicroDigital Limited, 37 Titus Street, Saltair, Shipley, West Yorkshire, BD18 4LU Telephone number 01274 618774 FAX number 01274 619482

email address sales@microdigital.co.uk web site microdigital.co.uk

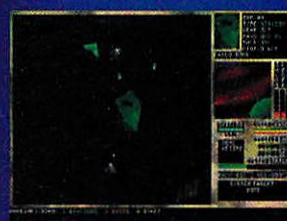
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StarFighter 3000 is back!



4 classic games on CD



StarFighter 3000 Other Worlds includes the new version of StarFighter re-compiled with many enhancements. Improved graphics, better sound, options to re-configure the keyboard and full StrongARM compatibility are among the many changes made to this new release.

Also included are StrongARM and RISC OS 4 compatible versions of the classic space trading game Elite, one of the best games of all time. In addition a full version of the mission based space game SunBurst from VOTI, and the superb Air Supremacy are included.

All games are fully RISC OS 4 compatible and can be run either from hard disk or from the CD.

Other Worlds Games CD Only £16.50!

DrawWorks New Millennium RRP £41.50

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Includes over 2400 fonts
Over 1900 example clips
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Over 500Mb on 1 CD

DrawWorks New Millennium is the best choice for graphics software for RISC OS, why? Simple, it's easy to use, many amazing effects can be done just by clicking on a few buttons. Text bent around circles, 3D effects, outline effects and many more with just a few clicks.

Secondly DWNM offers professional level features at a friendly price. Export to PC or Macintosh computers is easy and quick, you can even make GIF files for websites.

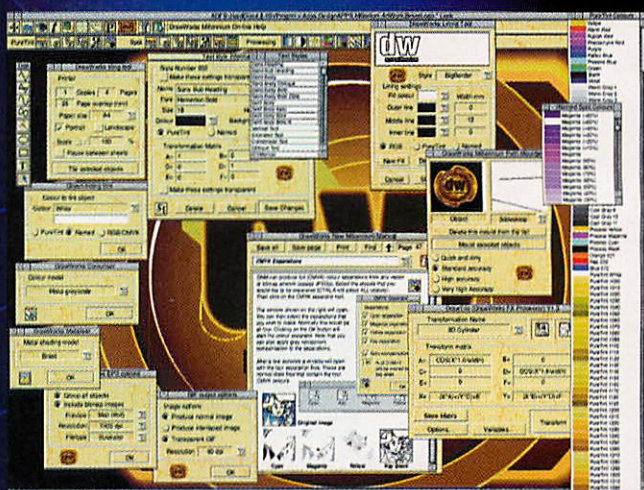
Thirdly DWNM is based on Draw. This means that any file made with DrawWorks can be saved out into any application that can load Draw files. All of the graphics in this advert were created with DrawWorks.

DrawWorks New Millennium comes with a comprehensive on-line manual that makes it easy to search for exactly what you want. Nor sure how to make a stencil, type in stencil and and manual will tell you how to do it.

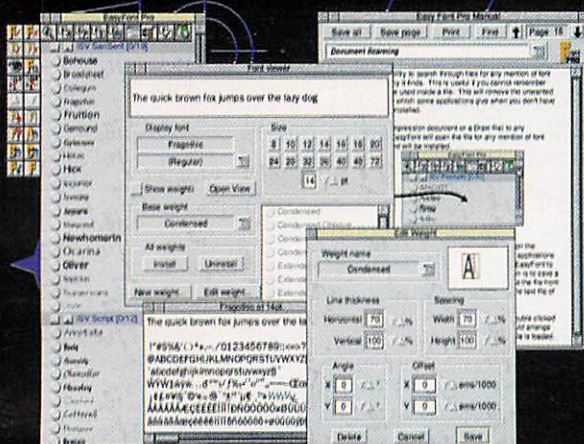
Not only that but DrawWorks New Millennium comes on CD and is supplied with almost 2000 example clips, almost 2500 superb quality fonts, Mr Clippy the clip art manager, FontFiend the font editor and lots lots more.

Not only can DrawWorks handle vector graphics but it can also edit and manipulate bitmap images as well. The DrawWorks series is the best selling graphics package for RISC OS, hadn't you better find out why?

The award winning graphics package!



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- New Font integrity tester, find out if fonts are faulty easily and quickly.
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*requires return of original master disk

www.isvproducts.co.uk

DrawWorks New Millennium requires RISC OS 3.6 or later, 8MB of RAM and a CD-ROM Publish ART 98 & StarFighter Other Worlds require RISC OS 3.1 or later and a CD-ROM drive.

All quoted prices (unless stated) are for single users versions only. Special offers relate to single user versions only.

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Picture this

Last month I mentioned the existence of *Draw* as an explanation for many RISC OS applications being easier to use than their PC/Windows equivalent. Another aspect of Acorn/RISC OS machines that has beaten the rest hands down, ever since RISC OS2, has been the screen display of text. The way that text is displayed on screen is still far superior to text on Windows machines.

Poor quality of Windows text has even been the cause of bad Web habits, with designers producing text as graphics in order to improve their text quality. Of course this reduces speed of access and stops readers setting their own text size or having the web text read to them — one or other being essential for many blind or partially-sighted users.

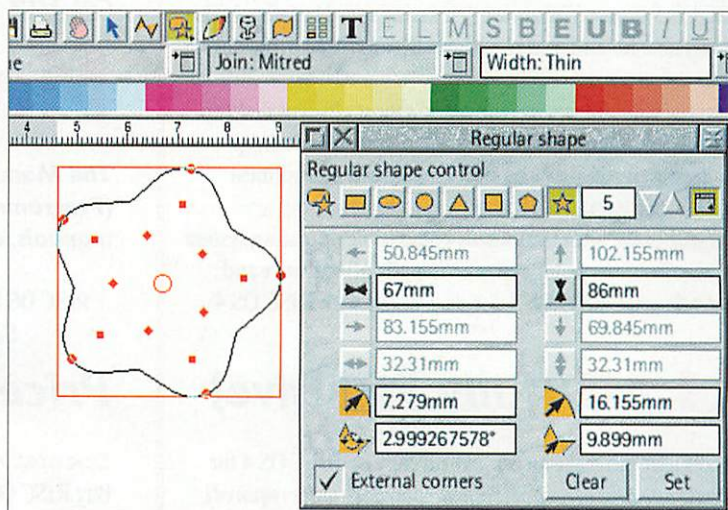
The superiority of the text is one thing — but are you using it at its best? I remember back in 1992 hearing complaints about the A3000 machines. Someone was trying to use Poster with about 12 fonts and had their font cache set at something like 12Kb. The poor machine was spending all its time cacheing and re-cacheing one font then another and hardly ever getting round to drawing the font onto screen.

In that case a minor increase in the font cache worked miracles. I think that about 80 or 90Kb allowed the program to do its job — and a quick lesson in good DTP practice, with the use of three rather than twelve fonts, followed. Even with a 1Mb machine the font cache should never have been set at less than 32Kb.

Today most of use have far more than the 1Mb memory that those A3000 machines used but are you using your memory for best advantage? When machines regularly had 4Mb of memory Acorn were recommending the use of a font cache of 256Kb.

My Risc PC has 50Mb RAM (32 + 16 + 2Mb VRAM) and my wife's RiscStation has 16Mb RAM. My machine has "cache bitmaps" and

Vantage has more and cleverer options than ArtWorks, but it's still not quite available as yet...



Anti-alias set at "up to 255 points" with the Initial font cache at nearly 1Mb and 'No font cache limit' ticked. These settings ensure that all fonts are anti-aliased and that fonts are re-drawn immediately.

Like that (now ten-year-old and still working) A3000 it's essential to check that you're using your memory efficiently and often worth reviewing your equipment to see if a memory upgrade is possible or desirable in order to do more or faster. For Risc PCs and later it's worth noting that some memory is available for just over £1 per MB — but probably only for larger (64 or 128 Mb) memory chips; smaller memory chips are likely to cost nearer £2 per MB. It's also worth noting that EDO RAM is cheaper than FPM but whether your machine can use EDO RAM is something best checked with your (RISC OS) dealer.

A couple of months ago I mentioned that Cerilica were using *Vantage* v0.97 'in house'. This has now been released to those of us who already have *Vantage* and it's clear that the positive comments from Cerilica were well-founded. At last *Vantage* can be used properly and, although I'm still relying on *ArtWorks* (and *Ovation Pro*), for most of my work with Fleur Designs I am starting to practise seriously with *Vantage* with a view to making use of

the additional features available in that product. At last the regular shape control works.

In the meantime *ArtWorks* has been given a superb boost with the release of Martin Würthner's latest plug-in. This time he has gone for the 'big one'. Courtesy of Martin, *ArtWorks* can now produce rotatable, multi-column text areas with a number of advanced word-processing facilities. With an obvious glance at the opposition Martin confirmed that this included the *ArtWorks* undo system (undo is one of the facilities not yet implemented in *Vantage*). It looks like I'll be using both products for a while, even when *Vantage* v1 is released.

Finally, Cerilica surprised us all by announcing details of two products. The first was their 'Publishing Pack' and the second a 3D design and publishing package. The latter is not a new product but is *TopModel* from Sincronia that was previously published by Spacotech Ltd.

Cerilica promise that *TopModel* will include additional resources at a reduced price when it is re-released in the New Year.

Contacting AU

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John Cartmell

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Comments from readers of Foundation RISC User

- "Well done on a BRILLIANT CD!!!"—Chris Flynn • "It's a really excellent job."—David Pilling
- "Foundation RISC User shows why its Editor, Richard Hallas, received the RISC OS '99 Award for Editorial Excellence when he edited RISC User for Beebug. It is a smart, professional-looking publication."—Peter Jennings, *Eureka* magazine
- "The Foundation CD has contradicted my opinion that I wouldn't be able to read a CD magazine happily."—Fred Bambrough
- "I'm extremely impressed with the Foundation disc. It looks good, reads well and is simple to navigate."—Richard Blythe
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Dare you ride on **Venom**?

Nicholas van der Walle doesn't close his eyes

Have you ever visited Alton Towers? You pay to scare yourself rigid and then pretend, at the end of the day, you were as macho as John Prescott and actually enjoyed it. I have a better idea — be a RISC OS user. And if I had written this a year ago I would have warned you to “Fasten your seatbelts... you’re in for one heck of a ride!”.

But I can now see that we have just conquered the last crest of this amazing roller-coaster and we can all breathe a bit easier. The past year has had its ups and downs just like any market but the year 2000 will be looked back on as a hardware milestone.

Not only did Castle give all Risc PCs the chance for a new boost through the Kinetic upgrade but then Millipede displayed an astonishing 2048 by 1536 screen resolution in a rich 16 million colours at shows, powered by the first prototype Imago motherboards.

Now we have the Microdigital Omega just around the corner. The proposed package sounds like amazing value and will be a great boon to a market going blue by holding its breath. A 1GHz machine anybody?

However, hardware has been covered on many occasions. If we don our blinkers and look at only this area of the market, the future is rosier than any point I am able to recall under Acorn's regime. Now it's over to arguably most critical link: the OS. Without which even a 100GHz box is no more than a glorified paper weight. Albeit a

hot one. So what can we expect in terms of OS development over the coming year? Well, thanks to a nice rich and sympathetic uncle in the form of Pace, a lot.

Probably. Pace have just tripped over the same obstacles as the classic RISC OS desktop market; new and very tempting 32 bit-only processors, antiquated printing system, lacklustre development tools and generally years of neglect by Acorn. None of which was helped by a rocky transition period to RISC OS Limited.

Pace has much more to lose than the entirety of our precious desktop market if progress cannot be made — and soon. Pace have also recognised that the desktop market has a wealth of talent which must be encouraged and tapped.

By neglecting this market they are fully aware of the bridges they would effectively be burning. All this equates to potentially is the desktop market being artificially propped up by Pace until we can truly stand on our own feet once more. Which is much better than just sinking without trace à la Amiga and Atari.

Where we have got to, then (if the wind prevails in our direction) is the brightest of futures with hardware and OS.

This is the stage when the final piece of the jigsaw has to materialise. What made the early RISC OS machines so good? Was it the fact you could play with *Edit* all day or that some bright company conjured up wonderful innovative packages such as

Impression and *ArtWorks*? Without great and ground-breaking software the platform will be no more a few years down the line.

A slick OS can only be slick if it is found driving a program that makes “outsiders” sit up and take note. Sibelius brought the platform to new users because it was apparently so good. Cerilica is looking to emulate that with *Vantage*, which already displays features unheard of in a price bracket under £10,000. But are we to remain alone? Who else is going to take up the huge challenge of thinking for themselves and inventing new things?

The benefits of adopting the RISC OS platform is that feedback is readily available and the hardware compatibility issues are near-negligible. The potential customer range is not extensive but neither are the support overheads.

I can only dread to imagine the initial investment required in setting up a new Windows-based software product. Surely developing technologies is much more lucrative? Let the “big boys” bear the cost of integrating it, marketing it to the end users and then provide direct support.

When the final stage of software development has been completed, we will truly have something to market. Just don't get me started on the combination of the words “marketing” and “RISC OS”, though...

Cerilica Limited
www.cerilica.com

TEK-know-

It is the year 2025. The human race has hardly survived its latest strike against itself: The Third World War. This atomic disaster left the world contaminated; living is only possible using a new drug called "SHOQ".

However, only two companies worldwide seem to be able to produce this medicine; a European and a Japanese enterprise. These two have their own private armies to defend their production resources as well as attack the opponent wherever possible.

So far for the story. But what is "TEK 1608" all about? It is a real-time strategy game, like *Command and Conquer* which you might know from the PC, or *Dune II* which appeared for RISC OS many years ago — and also a bit like *Cannon Fodder* where you move individual soldiers around.

In this genre, the player commands small battles from a bird's eye view, sending battle units around using the mouse. All this is not turn-based, but happens continuously. Factories are producing new units, and the clash with the enemy reduces their number again. Transport vehicles carry raw material to different places, and

generators produce more energy for unit production.

At ease, Soldier!

But unlike other real-time strategy games, TEK does not go much deeper into this so-called "resource management system". TEK's focus doesn't lie so much on the typical "look for resources, build up an army and send it towards the enemy". The idea is to give the single units much more power.

Each and every soldier, tank, chopper or jeep can receive its own task, like "patrol around this headquarter" or "guard this fragile unit", or simply "seek and destroy". Further, every unit can be equipped with different armament, armour and other specials. That sounds a bit difficult if you try to control about fifty units at once, but Dominik Heide of Artex Software assures me that it won't be. "The interface is designed to be as simple as possible, and yet you

can do lots of different things with it, just like with our great operating system RISC OS". RISC OS might also be the reason why you assign these tasks via pop-up menus.

The third dimension

The game is a 2D game which means that all objects placed on the screen are bitmaps, or sprites. Thus, you cannot rotate the game map to view the battlefield at different angles. But anyway, currently released 3D real-time strategy games have proven difficult to use due to the very fact that the camera can be rotated, and the player loses the overall view. Looking at carefully placed units and buildings from different positions can hinder rather than help — too much detail.

Nevertheless, TEK features hills, and that also adds a new dimension to the game. You can hide behind hills to let a stronger opponent pass, or you can climb to the top to have a wider view. "Thus, you have a tactical component that can be used in a variety of ways during the game", comments Jan Klose of Artex. "Imagine planning an ambush. You know that the enemy will move past your position very soon, so you hide your heavy units behind a slope. Then you use some light quick units to attack the enemy, who will chase you, and all of a sudden you let your hidden army out of the shadows to surprise the computer player!"

Military intelligence

Surprisingly the computer player could become difficult to deal with. Some of you might know games where the enemy computer player reaches your camp, and the your guards stand there, watching the enemy smashing houses. The team behind TEK, especially AI



logy

programmer Barry Aulton, plan not to repeat these mistakes in TEK.

Sophisticated algorithms analyse the situation of both the computer player and the own units continuously and react to all the opponent's actions.

Every single unit has its own artificial intelligence and evaluates its current situation for itself. "Is the enemy too strong?" "Do I have supporting units nearby?" Or even... "Is this a trap?" As usually, we will have to wait and see if these features work as intended, but we can be sure that no unit will stand around on the battlefield waiting for orders...

Art of games

The graphics are being created using both RISC OS and the PC. "All the buildings were designed using *TopModel2* and then ported across to the PC for texturing and rendering in Bryce", explains Max Palmer, graphics artist. "*Photodesk* was used to manipulate textures while *Compo* was great for producing mock-ups of the game and generating masks for the bitmaps."

Max admits that he admires strategy games by Westwood, especially *Dune II* and *Dune 2000*. "Inspiration for the buildings came from many different sources — I wanted the barracks to resemble a desert tent, while the control tower has its origins in the design of a water tower! Above all though I sought to create a set of buildings that shared a clean, elegant, futuristic style."

The cover artwork shows what a good job he's done.

Get online!

Network play is also planned. "The whole program is written network-ready", says Dominik Heide. "As soon as the game itself is up and running, we will test network play". That means you can play TEK versus other human players over the Internet.

There will probably be a TEK server that manages different game sessions, and a message board to plan TEK sessions on the 'Net. This is





necessary due to the amount of people available in the RISC OS community compared to the PC world.

When you are releasing a network game for the PC, you can be pretty sure to find an opponent every time you are visiting the Net. This won't work for TEK, thus there will be some sort of calendar where people can tell others when they will be online and would like to have a TEK match.

Linux, Mac OS and PC

Artex Software have more plans with TEK. If the game is accepted in the RISC OS market, Artex intend to produce conversions for other platforms. "People are very eager to play games on Linux, but there aren't many available yet", says Jan Klose. "The same is true for the Mac; although there are more games titles available than for Linux, there is almost no good realtime strategy game around. Someone should change that. Why not us?"

And, of course, there's also the PC, with the biggest market for games, but also the hardest competition. Real-time strategy games are available en masse. So let's wait and see what happens in the future. But anyway, can this affect RISC OS TEK players at all? Yes, it can, because all these versions will use the same network protocol which will allow cross-platform TEK matches, and that could even draw some attention to the RISC OS platform.

Artex are very well aware that the RISC OS computers are no more a real games platform as they were in the 90s. But there is still a demand for entertainment. This is one of the

reasons why TEK is also designed for "casual gamers", people who don't like to read huge manuals and just want to switch on their computer for some fun or distraction.

TEK is meant to be easy to learn, with a gentle learning curve, but complex enough to guarantee many hours of entertainment. You don't have to be a hardcore gamer to enjoy TEK; some tactical thinking might be all you need.

Bored now...

Some people might have noticed that TEK was announced about two years ago now. Although that's no very long time for a game from conception to release, people were already hearing of release dates a while back. And we have to bear in mind that the game is

still not available. You could easily blame Artex for over-optimistic schedules, and that would surely be true to some extent, but something else happened, something completely unexpected.

TEK 1608 was originally planned as a joint-venture between Acorn Computers Ltd. and Artex Software. That was decided on a meeting at Acorn's office in Cambridge back in 1998. But suddenly, Acorn made half of their staff redundant in one of their infamous "restructuring" attempts. Artex lost their contact people at Acorn (Dave Walker and Kevin Lingley being two of them), and some time later the whole company disappeared.

Anyway, Artex decided to continue developing TEK, albeit with a significantly smaller budget as intended. The planned movie clips suffered most from this. Nevertheless, TEK remains one of the few RISC OS games which are developed in a professional manner, and by a whole team. A team with real graphicicians, one might add.

So when can I play it?

Alright then, what is the release date? Spring 2001. Is that definite? Nothing is definite in the computer world. But it is quite likely.

END



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Of mice &

As we all know, one of the major strengths of RISC OS is its user interface — that is, the desktop. The RISC OS desktop is an example of a WIMP environment, and whether you consider that WIMP stands for “Windows, Icons, Mouse and Pointer”, or “Windows, Icons, Menus and Pointer”, RISC OS usually needs a mouse or similar pointing device in order to perform many important operations.

Although the mouse which Acorn supplied with the later machines was of reasonable quality, it is by no means “invincible”. Heavy desktop users may need to replace their mouse, either as a result of damage, or general wear and tear. The simplest option might be to buy a similar model, but in this article we’ll consider a number of different devices which can be used with RISC OS machines.

All Acorn manufactured RISC OS machines, apart from the A7000 and A7000+ are fitted with a simple mouse port, based around the “Bus mouse” standard. Mice attached to this type of port can have very simple electronics inside, as the machine does all the hard work of decoding signals and determining which direction the mouse is travelling in and so on.

Although the Acorn mouse port simplifies the design of the mouse, this type of mouse port was reasonably expensive to implement on a PC, and so never took off in the PC community. This means that Acorn standard mice do not benefit from the economies of scale found in the PC world.

The A7000, A7000+ and machines from the newer RISC OS hardware manufacturers (such as the *RiscStation* and *Mico*, and the forthcoming *Imago*, *Omega*, *Nucleus* and *RiscStation portable*) use a PS/2 mouse connection. Each mouse contains a small chip which monitors the movement of the mouse, and passes the information

on to the machine. The format used to transfer the information is similar to that used by the Risc PC keyboard, and, in fact, they use the same style of connector (six pins rather than the nine used by Acorn-style mice). Owners of machines fitted with an Acorn-style mouse port can use the PS2Mouse interface from Stuart Tyrrell Developments to give their machines a PS/2 connection.

Serial transfer

All RISC OS machines are fitted with at least one serial port. Although the number of serial mice available seems to be declining as manufacturers offer PS/2 and USB combinations (rather than PS/2 and serial), there are still a reasonable number of designs to choose from. Later versions of RISC OS have support for serial mice as a configuration option, and there are a number of public domain programs which allow the use of a serial mouse in conjunction with the device attached to the standard mouse port.

USB devices cannot be used on any current RISC OS machines, although the specifications for future computers imply that they will have USB ports as default. MicroDigital were rumoured to have a USB podule for earlier machines, and it seems reasonable to assume that we’ll see production interfaces both from them and from other developers. The methods for interfacing USB mice form part of the USB specifications themselves, so it’s likely that the earliest drivers produced will be for USB rodents.

Mousing about

The original Acorn mouse is manufactured by Logitech. Although the mouse is an “OEM” version, and obviously not of quite the same quality as Logitech’s retail offerings, it is, nonetheless, a more robustly designed mouse

than might be supplied with many PC’s.

In use, the mouse can be somewhat light, which can lead to problems if the mechanism starts to get clogged up with debris. A heavy mouse ball can easily be retro-fitted, and helps considerably, as do some speciality mouse mats such as 3M’s precise pointing surface.

Replacements for the original Logitech mouse can prove expensive and difficult to obtain, and so an attractive alternative is a clone mouse, available from CPC or many RISC OS dealers.

At first glance the CPC mouse seems of similar quality to the original Logitech. It comes fitted with a heavy mouse ball as standard, and operation can be reasonably smooth and positive. Early revisions of the mouse design were based around mice which were originally to be used with Amiga and Atari machines.

Unfortunately this proved to be a problem for Acorn users, as the transistor-based design could, under certain circumstances, cause an internal fuse in the Risc PC to blow, and this could only be replaced using complicated surface-mount soldering techniques. Although later mice had a revised design, the original mouse did much to damage the reputation of the device.

As a result of the problems with the clone mice, a number of Acorn dealers decided to develop their own — the most notable of these being the Clares Mouse (which was similar in design but with different electronics), and CTA’s Ergo Mouse.

The CTA Ergo mouse looks at first glance like it might be a two button device — it has a large select button, and slightly smaller adjust button. The menu function is performed by a thin button in between the two, which is raised in the centre. The mouse is curved slightly to the left, and so is easier

men

*Jacqueline Stanley takes a look
at your little peripherals*

for right-handed people to use — left-handers might find that their index finger catches on the menu button slightly. The mouse plugs into the standard Acorn mouse port, and again comes with a heavy mouse ball.



Logitech Gamers

This mouse was originally sold as the Logitech MouseMan (before the MouseMan sprouted the more ergonomic design used in later versions), and is still available as the Gamers Mouse. If you're keen to find a simple replacement for the Acorn mouse, without fancy ergonomics, extra buttons and wheels, this mouse is worth considering.

The mouse is supplied with adaptors so that it can be used with a PS/2 or serial port. Although the heart-shape of the mouse is reasonably "tame" when compared to more modern mouse shapes, the design was originally one of the first ergonomic mice. The body of the mouse has a small indentation where the thumb (assuming a right-handed user) fits, and the buttons are pressed with the body of the fingers rather than the fingertips.

In common with most Logitech mouse designs, the ball lies directly between the thumb and little finger when the mouse is held correctly, and as a result the mouse is well balanced and easy to use. I used the original MouseMan variant of this mouse as my first replacement for the Acorn mouse, and I'm confident that it has contributed to the relief of the



Repetitive Strain Injury I was suffering with at the time.

The current MouseMan Wheel design may seem familiar — in fact the three button variant was to be

shipped with the ill-fated Phoebe. The shape of the mouse is very profiled, and so is biased even further towards right-handed use. When used in the right hand, the mouse is extremely comfortable, and the moulding allows the thumb to rest neatly on the left-hand side of the body.

In fact Logitech have placed a button under the place where the thumb would naturally lie. Although the non-wheeled variant of the mouse is not available any more, the Logitech devices default to a sensible mode of operation when used with the A7000 and so on — pressing the wheel, or alternatively pressing the thumb button will act as the menu button on these machines — the third-party PS/2 interfaces for other machines may offer more wheel functionality. There is also a public domain wheel-driver program called *WheelMouse* which allows the operation of wheeled devices, albeit attached to the serial port only.

As with the Gamers Mouse, the MouseMan encourages you to hold the mouse correctly, and again the mouse ball lies directly between the thumb and little finger. Switch action is probably a little lighter and more positive than the Gamers Mouse.

If you want to use the MouseMan on the serial port of your machine, beware the two different versions of the mouse which come in very similar packaging. The MouseMan+ is a serial and PS/2 device whereas the MouseMan Wheel is PS/2 and USB only.

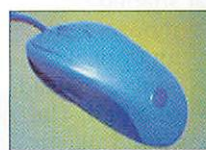
Going all optical

Much has been made of Microsoft's foray into optical mice which do not require a mouseball at all. Logitech have also entered the field with their Optical MouseMan and iFeel mouse. These mice have a bright LED which shines out of the bottom of the mouse to illuminate

the surface you use it on. There is a small camera inside the mouse which watches where the surface underneath the mouse is moving. By analysing this information the mouse can determine the speed and direction in which it is travelling.

The profile of the Optical MouseMan is similar to the MouseMan+, although it is in a fetching deep blue colour and very slightly larger. Of course the lack of a ball means that the mouse can be smoother and lighter, will never get clogged up, and will require minimal cleaning.

Although the mouse is normally a joy to use, I found a small niggle — I normally lift up a mouse if I get to the edge of a mousemat and wanted to move the pointer further on screen, but I found that the optical mouse still detects movement of the surface



underneath it from a few millimetres away. Often I'd find that I lifted the mouse to

move it elsewhere and the pointer would follow the mouse back along the screen because I hadn't lifted the mouse high enough.

When the Optical MouseMan is connected to a suitable PS/2 port, the logitech logo on the back of the mouse shines with a eerie blue glow. It's a little detail, but it looks very pretty.

Although the Optical Mouseman is available in a PS/2 / USB combination, Logitech also produce the iFeel, which, unfortunately, is a USB-only device. The iFeel was developed with Immersion Technologies Inc, and contains a small motor used to give feedback. When used with a PC, software controls the speed, amplitude and frequency of vibration of this motor, and so the mouse can give a resounding "clunk" when passing over an icon, a buzz when passing over a

close icon, and so on. Although this can be disconcerting at first,



the action can become quite reassuring, and I've sometimes considered

traditional mice to be quite non-interactive since using the iFeel. This should be one of the first devices supported by RISC OS USB drivers, if only for novelty value.

Mice of the evil empire

Both Microsoft IntelliMouse Wheel Mouse and Explorer are based around Microsoft's optical mouse technology, which predates the release of the competing Logitech devices by some time. The wheel



mouse is a reasonably traditionally-shaped mouse, with an optical sensor instead of a ball. The

rear of the mouse has a red plastic cover which illuminates when the mouse is in use. Although the Wheel mouse is not of the same quality as the Logitech Optical MouseMan or the Microsoft IntelliMouse Explorer, its main advantage over these two devices is cost — I paid less than £20 for mine at a major electrical outlet. Both mice are available in PS/2 and USB versions only.

The Microsoft IntelliMouse Explorer is the big brother of the pair, and is finished in a classic silver and dark-grey. It has two buttons operated by the thumb, although these cannot currently be used under RISC OS.

Although the Explorer looks the prettier mouse, it doesn't quite feel of the same quality as the Logitech equivalent, despite the quality of the plastic being better, and, arguably the design itself. The Logitech device has a soft-touch

plastic on the thumb-side of the mouse which makes it easy to grip, whereas the thumb can slide quite easily off the silver plastic of the Explorer — perhaps this is influencing my perception of the mouse as a whole.

Microsoft were inventors of the Intellimouse wheel technology, and so, as expected, the wheel implementation on their mice is second-to-none — the wheel rotates easily, with a light and non-intrusive click. Unfortunately, while most other devices will default to sensible operation if the host machine doesn't indicate that it knows about wheeled mice, the Microsoft mice will ignore the wheel completely, and, as pressing the wheel is the equivalent of pressing the menu button, the mice are unusable except via STD's *PS2Mouse* interface, or until a patch is produced which allows PS/2 equipped RISC OS machines to accept intellimouse-style devices.

Video killed the radio mice?

Although there are a number of radio-controlled mice, these are reasonably expensive. The Cable-free 4D mouse from A4Tech is a compromise in that it uses Infra-Red technology. This keeps the price of the mouse itself down, but it does mean that the mouse must be in line-of-sight of the receiver.

The receiver is a small disc-shaped object in translucent purple plastic. It has a PS/2 connection only, and so must be plugged into an A7000-style machine or a PS/2 mouse interface. There is a small self-adhesive velcro pad under the receiver to aid mounting.

The mouse itself is a fair quality device. When first opening the pack the mouse feels a little light, although this may be because it lacks the usual payload of a cable. The mouse accepts two AA batteries, and fitting these makes the mouse up to a comfortable

weight. The mouse has two wheels, used for horizontal and vertical scrolling when used with a PC or mouse interface.

Unlike the other wheel mice reviewed, these wheels cannot be pushed and operated as mouse buttons, but rather the mouse has a third button on the side of the mouse, operated by the thumb.



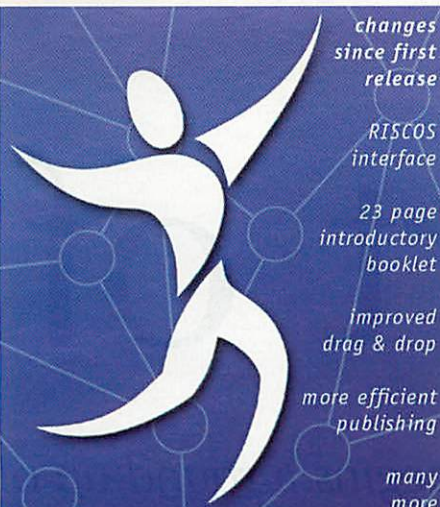
In use, the mouse receiver has a green LED visible under the plastic, which flashes whenever a report is received from the mouse. The mouse has a surprising field of operation, due to the way that its infra-red emitters are located behind a window at the front of the mouse, and it's easy to see when the path to the receiver is obscured (the green LED stops flashing and the pointer stops moving). It's interesting to watch the LED flash at different intervals when the mouse starts to go into various standby modes if left alone, although the mouse is not sluggish to respond, even when in standby mode.

No choice at all

Even given this brief overview of a limited number of devices, it's obvious that there are many mice and trackballs which can be used with modern and forthcoming RISC OS machines, and many can be used with older machines via the serial port or third party interfaces. If you're replacing your mouse, have a look around the more interesting input devices which are available — the chances are that you'll find one which will suit you well.

So, whichever one of these mice you fancy, all you need to do is get hold of your local RISC OS dealer (and you can find him using the centre page section) just have a word and say what you want.

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The art of

Andrew Weston begins a round-up of presentation packages for RISC OS

On learning that a review of *Composition* was part of a series on presentation software, I was intrigued. Clares software is traditionally of high-quality and well-presented and having some graphical interests I was eager to find out what this image-manipulation package could offer but was this really a presentation package?

Composition is an image-manipulation package allowing you to combine images imported from other programs and experiment with effects without altering the original image. This makes the package of appeal to both professional users and perhaps less-talented individuals who want to achieve a certain effect through combining images that pique their interest.

In fact, *Composition* has been around for a number of years and it has grown beyond its original form through a series of upgrades into something altogether more powerful.

The notable features are its Plug-In Compliant (PCA) design and now its own script language (Comoscript) for automation of the software's capabilities. Thus, while approaching this review from a newcomer's slant, I'll aim to describe the two aforementioned 'extras' and what they bring to the 'core' image manipulation and processing functions of *Composition*.

Bearing in mind the existence of the availability of two major presentation packages for RISC OS (*OHP2* and *Noticeboard Professional*) which require slides to be largely prepared beforehand, *Composition* should be the ideal accompaniment. The availability of creative as well as manipulative tools within *Composition* reinforces this idea, with or without a conventional art package, for reasons which will become clear.

Core image functions

Composition offers an at first

bewildering amount of functions and effects for processing an image further and combining it with other images. All images loaded to the program are displayed on the main 'canvas' window. A wide range of image-format importing and exporting is allowed including the major Web formats (JPEG, GIF, PNG) and others for PC compatibility if required.

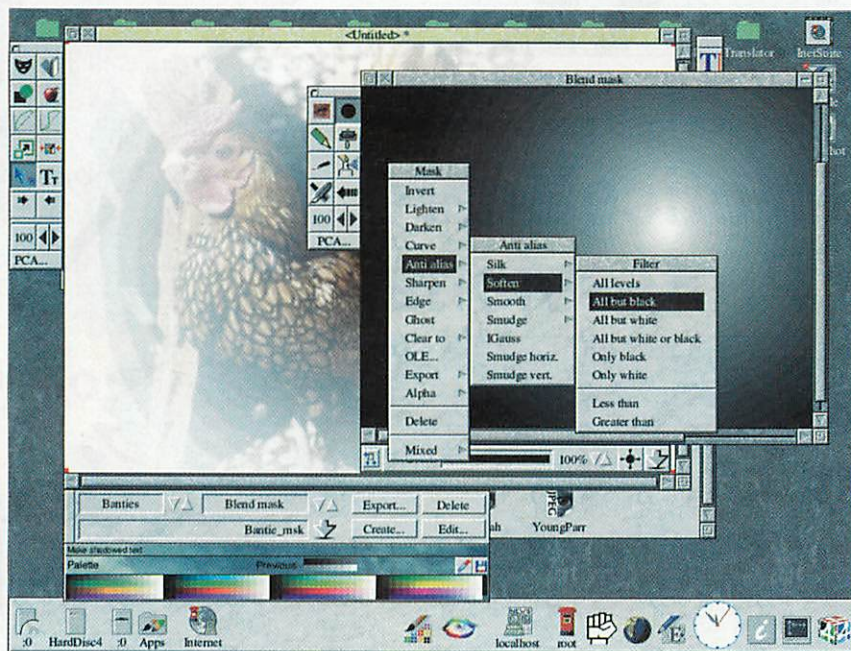
The most basic of *Composition*'s functions will be familiar to any *Draw* user, for example re-arrangement of objects in the stack, copying, scaling and also various transformations in two or even three dimensions. The latter thus gives the additional illusion of perspective not provided by *Draw*.

Beyond simple re-arrangements of pre-made objects there lies a vast range of functions for enhancing your intended visual composition. It's worth noting here that the main toolbar is displayed in conjunction with a 256 colour palette for quick colour access, an interactive help line and also a Comoscript toolbar allowing access to pre-written (and user-defined) functions written using the scripting language.

A full range of facilities are provided for modifying the way an image appears over a background. This is achieved through opacity selection, masking and facilities allowing adjustment of the properties of red, green and blue channels of an image. Numerous tutorials are provided throughout the manual to assist both with learning to use the software and making the most of the facilities available. Good documentation is also provided in addition to act as a reference. It is pleasing to see yet again, Clares' dedication towards ensuring the user uses the software to its full potential.

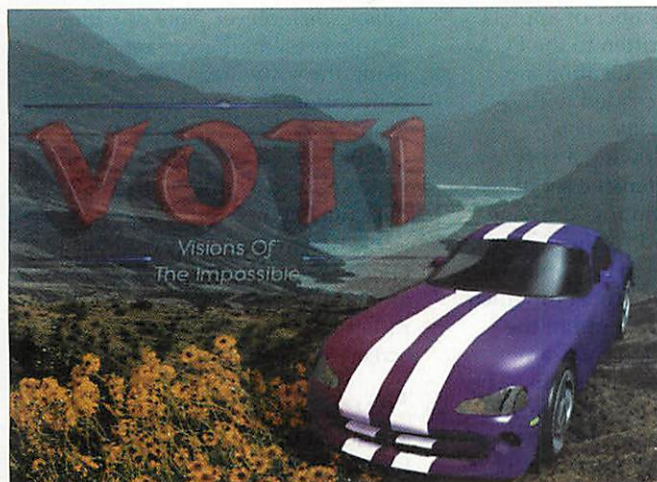
Masks and filters

Perhaps the most powerful and almost certainly the most flexible



A masked image, its mask editing window and the range of processing functions available for this mask (colour gradations due hardware 32,000 colour limit on the size of this shot)

presenting



Compositions advanced masking, shadowing and opacity effects demonstrated by the combining of the VOTI logo and a car model from their up-coming game

component of *Composition*'s repertoire is the masking option. A mask can be created for any textual or bitmap object created or imported into *Composition* allowing selected areas or the whole image to be partially or wholly concealed in a variety of ways both simple, complex, pre-defined or user-defined.

Vector objects (such as Drawfiles) are accepted but there is the option of converting to a bitmap (with optional anti-aliasing) should a mask be desired. In fact, the degree to which a mask can be customised is staggering. Even for pre-defined mask patterns (for example a vertical fade of an image into the background canvas colour) the range of the fade and the points at which the fade starts and ends can all be adjusted to requirements. Options exist for integrating further masks with ones already created thus opening the way for very refined or unusual effects.

Alternatively, a mask can be created from fresh using the mask editing window which also allows any existing mask to be edited. This window provides it's own set of tools (such as drawing, filling, spraycan, filling) for specific mask effects to be applied.

A sprite can be dragged into a target area in the dialogue box associated with certain mask editing

tools to enable a particular sprite of interest to be used as the editing tool. As might be expected, it follows that a single sprite may simply be placed onto the mask editing window and used alone.

With the mask editing window

is also provided a large range of image processing functions including smoothing, sharpening, lightening and darkening for example.

One option among the mask editing menu items is a facility available to all masks and objects used in *Composition*: object linking and embedding (OLE), which enables a file imported into the program to be edited in a default (or user defined) application and then saved causing *Composition* to automatically update its own copy of the file in memory with any effects specific re-applied.

This is in addition to the object sharing and interchanging facilities of Clare's PCA specification and increases the flow of creating one's composition by avoiding the disruption which might result from the rearrangement of windows for file loading.

Further to the OLE capabilities is the ability to move image data internally between different functions of the program for example moving copies of loaded sprites from the canvas into a dialogue boxes of another function (such as a tile for the canvas background).

This kind of flexibility built in to *Composition*'s various functions combine to represent a very responsive user interface which is obviously complementary to the usefulness of the package. Due to the

depth of *Composition* I would recommend any newcomer to follow the wealth of tutorials provided to find inspiration and to experiment. However, a few other effects deserve a mention as they would likely be an integral part of many creations.

Shadows and effects

Composition gives you the opportunity to add shadows to any object or mask. This feature can be used to add impact or for realism as a large range of control is given over the shadow's projection and position, thus implementing a 'pseudo-3D' effect. Since a mask can be created for the shadow, as might be expected, the shadow can be edited with any of the mask processing functions already described.

A set of features commonly found among image processing packages is included within the filter dialogue box allowing sharpening and embossing among others. A particularly powerful feature is the 'smart filter' option where you can customise the action of a filter according to a test performed on the pixels making up the object / masked object.

This works conceptually like an IF...THEN...ELSE conditional statement allowing an alternative action to be taken if the condition isn't met so, for example, one could sharpen or soften a pixel relative to its neighbours depending on the current state of these pixels. This is without doubt a powerful feature and will allow for many more possibilities than a simple 'blanket' filter and yet again can be used with a mask.

I was personally pleased to see the presence of a trimming function in *Composition* which can reduce the size of a sprite precisely by pixels. This is particularly useful when attempting to design graphics (perhaps for a Web-page background or even a game) composed of an



Text creation in *Composition* used in combination with shadow and opacity functions

aligned repeating unit. In these circumstances several copies of a graphic have to be placed together in a defined area. Using the full version of the graphic unit it is not always possible (say, using *Paint*) to do this unless the unit will fit into the defined space.

One important feature especially if used for creating graphic stills (slides) for presentations, is the dedicated 'colour-block' dialogue box that the program provides for creating coloured patterns for tiling onto the canvas either singly or repeating.

The tiling dialogue box attempts to generate symmetry for any tile added which in itself can result in some unusual effects. The total control given to the user in creating a colour block with the positioning of colour points, their colour and intensity makes possible many striking backgrounds useful for a variety of purposes.

PCA plug-ins

Since version 1.10 of *Composition*, PCA facilities have been provided with the package. PCA is system whereby applications written to a particular specification can work in concert on a common object held in a common area in memory. In a program like *Composition* this can add an indefinite and customisable set of additional tools.

As all PCA tools integrate seamlessly with each other the power of an application can potentially be extended immensely. PCA has several advantages as a standard which mostly revolve around expandability, flexibility and memory efficiency.

The March 2000 edition of *Acorn User* talked about PCA's potential should it be used more widely. A

number of applets written to the PCA specification are provided with *Composition* allowing a very extensive set of painting, drawing and further

processing functions to be applied directly onto an image most of which are unavailable (at least not in the same form) in the main program. The most useful would seem to be painting and drawing tools which allow a range of the processing effects similar to those available in the mask editor program but which operate directly on the selected image.

Composcript

If all that has been described of *Composition*'s abilities so far isn't enough, a whole new dimension has been added in the form of a scripting language which can automate sets of actions by defining them in a textual form interpreted as a programming language by the application.

Thus for batch processing of a number of files (perhaps a series of video frames or sprite frames in a game animation), performing an action repeatedly would be made much more efficient by writing a script for the image manipulation operations to be carried out with.

It should be remembered that scriptlets (sections of Composcript performing a specific function) can be added to the main window for easy access and four examples are provided by default.

Composcript is superficially similar to BBC BASIC with loops, variables and procedures implemented in much the same way together with specialised commands and protocols for creating objects for example. The scripts are created using any text editor and dropped over the canvas window to be executed.

One surprising additional feature of the Composcript language is the "mouseover" command which attaches a procedure to a click over a

Composition object. This can allow simple presentations to be created using the software, a function not conventionally associated with graphics editors at least in the RISC OS market.

Combined with the other operations you could create presentations with quite interesting effects, such as altering masking on an object to reveal new sections rather than simply switching from screen to screen.

Summing up

The latest update to *Composition* provides an extremely versatile and powerful piece of software with the potential for expansion and interconnectivity via its PCA implementation. I have only briefly brought to light some of the possibilities. Many more technical features are just waiting to be used in new and novel ways.

I would fully expect that this package would be capable of delivering results to satisfy professional requirements while allowing a beginner to achieve effective and pleasing images in general with ease.

Although the manual has a lot of examples, the additions of PCA and Composcript will nevertheless be confusing to many without clear and comprehensive documentation.

As the package stands though this is not overall a problem and *Composition* truly deserves to make an impact in a variety of graphic-intensive and dependent professions and pastimes.

I would like to thank Clares for technical support in reviewing this software.

END

Product details

Product: Composition
Price: £99.95 (p&p free)
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The future is really beginning to take shape, the release of the Microdigital *Omega*, plus the tremendous announcements from Pace and RISCOS Ltd mean that the new age for RISC OS is almost on us. Now is the time to start considering when you'll get your next computer.

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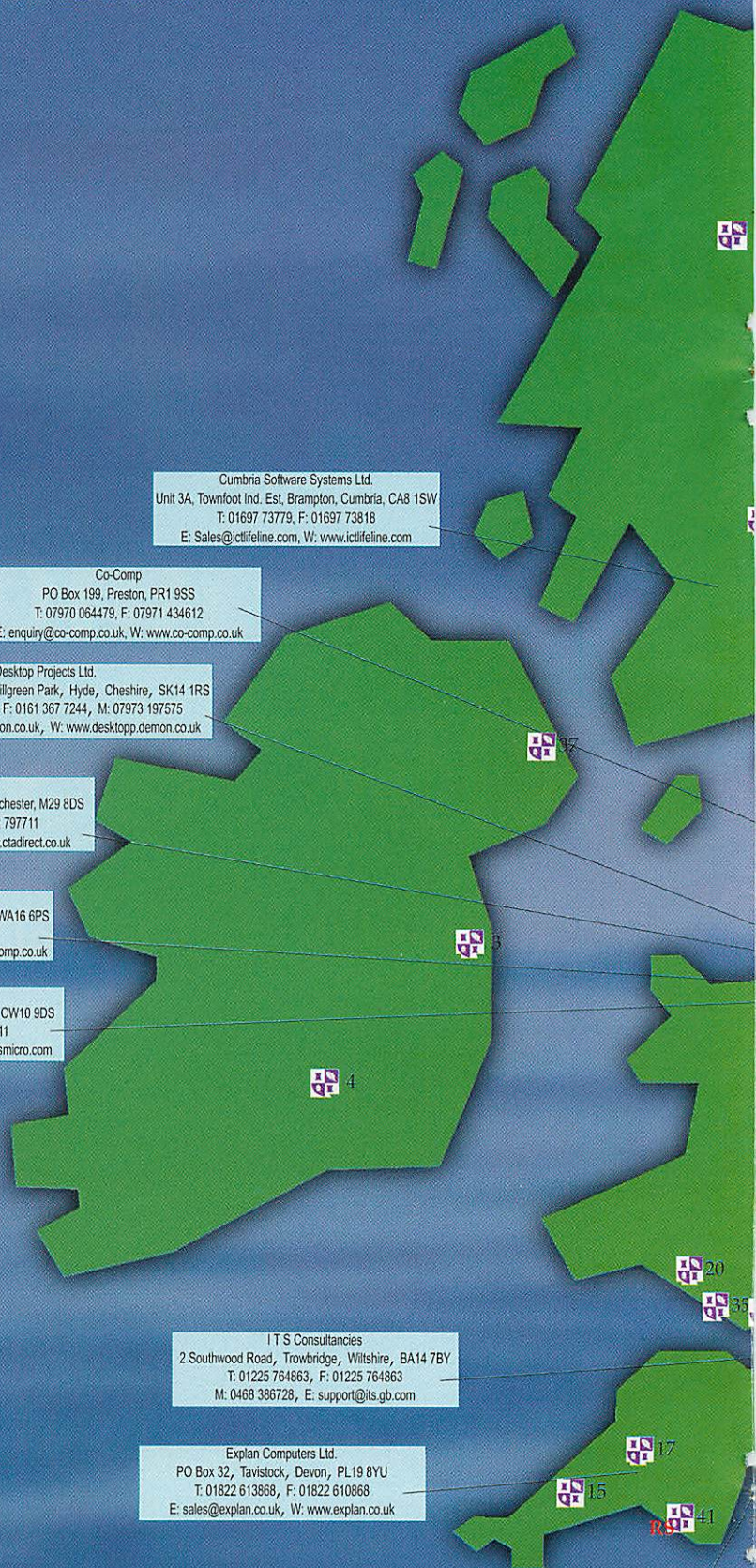
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Into the Othernet

Following on from last issue, the second category of newsreader software is the software which displays the newsgroups you are subscribed to, and allows you to read and post messages in those groups. Again there are several available for RISC OS such as *MessengerPro*, *Pluto*, *Voyager* and ANT's (no longer supported) *InetSuite*.

Figure I shows a newsreading listing with the subscribed news groups, and the messages contained in them.

One of the terms used when dealing with newsreaders that causes the most trouble with new Usenet users is "thread". Newsreaders often give the option of "threading" articles and people often refer to "threads" within a newsgroup.

A thread is simply a group of articles in a newsgroup that each have the same subject, in which one of the articles is the original post and the rest are follow-ups (replies). Sometimes a thread can last so long that the original post is no longer on your Internet providers newsserver and nothing but follow-ups exist.

Using the "Kill File"

Because most Usenet newsgroups are not moderated, Usenet can seem to be cluttered with annoying ads or stupid questions (or plain stupid people). This can be easily fixed, however, with the use of a "kill file" which contains instructions that tell your newsreader what articles in which newsgroups to automatically erase.

Most newsreaders allow the user to set-up their kill files using easy-to-use menus or dialogue boxes. The

user can usually choose to delete messages with certain phrases or sub-phrases in the Subject: line or in the From: line, or by author, or even by thread.

Many newsreaders allow these "kill strings" to be entered by newsgroup, set of newsgroups or globally. So, you might want all articles from madguy@aaug.net to be deleted from the **comp.sys.acorn.misc** newsgroup, but not from any other newsgroup (perhaps he's a Windows user). Or you might want all messages (in all newsgroups) with the words "fast cash" to be deleted (these words, among others, are commonly used in chain letter advertisements). Figure II shows a person being added to the killfile in *Pluto*.

Binary files

The **alt.binaries.*** newsgroups, among others, contain binary files for downloading. Binary files are simply non-text files that can be either programs, compressed files (Spark or ZIP), pictures (JPEG's or GIF's), sounds or video clips. Since binary files can't be displayed in articles as text (because they aren't text files), they must first be converted into ASCII text.

Most newsreader software can do this automatically when you attach a file to a message, but if not, there a number of shareware utilities available for RISC OS which can do this for you.

Figure III shows *UUcoder* waiting for a file to be dropped onto its window. Having said that it is considered in almost all groups, except the "binaries" groups, to be the height of bad manners to post any form of binary — and the

Neil Spellings wraps up his series on the Internet

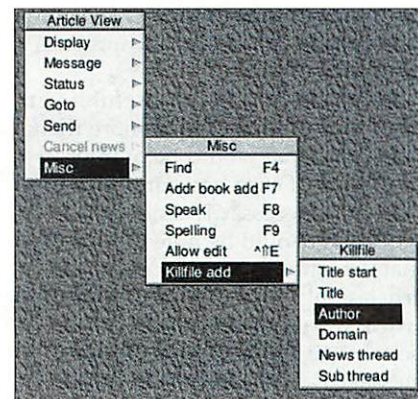


Figure II: Adding a new person to the killfile

larger it is, the worse the reaction will be. It's entirely possible that you will be mail-bombed: people will send your binary, or a bigger one, back at you many times by e-mail choking your mailbox and possibly getting your ISP to ask questions as to what's going on as more and more disc space is eaten up by incoming mail. Don't do it.

There are two basic types of articles that can be posted to Usenet: an original post and a follow-up. An original post is simply an article posted to a newsgroup that has an original subject and has the potential to become a thread while a follow-up is a reply to a post in the same newsgroup.

Some newsreaders call follow-ups "replies," but a reply is usually considered a personal response via e-mail, not a public post to Usenet. Sometimes, users post a follow-up message, in addition to a personal e-mail reply in case the original poster misses the response on the newsgroup. Figure VI shows composing a posting to a newsgroup.

Cross-posts and spam

When you post an article to Usenet, you can post it to one or more newsgroups. If you post an article to more than one newsgroup, you are

docs	1
argonet.acorn.misc	1
argonet.acorn.voyager	249
comp.sys.acorn.announce	2
New version of the shareware Font Manager, !FontMgr2	1
WACG Meeting 1st Nov Photodesk and Osiris	1
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uk.local.london	1000

Figure I: Checking out the newsgroup messages

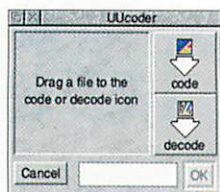


Figure III: Preparing to include a non-text binary in a posting

doing what is called cross-posting. You can usually tell your newsreader to cross-post by simply placing a comma between the names of each newsgroup you want your article posted to. Be sure not to have a space between the comma and each group.

Cross-posting can be useful if you want to post an article to more than one group that would be of interest to readers of each newsgroup (who might not necessarily read each group). It should be noted, however, that you should always cross-post articles only to newsgroups that the article would be relevant to. Often people use "bulk mailers" to send messages and adverts to thousands of newsgroups at a time. This is known as "newsgroup spamming" and is highly frowned upon by Usenet regulars.

The word *spam* is derived from Monty Python's "spam with everything" sketch (the prelude to the Lumberjack's Song) where everything on the menu comes with spam.

Bad habits

While the Usenet community can be some of the most helpful people when it comes to providing answers to your questions or just engaging in a friendly conversation, there are some things you can do that will alienate you from practically everyone in your favourite newsgroup.

- Don't SHOUT in Usenet; Writing in capital letters (LIKE THIS) is considered shouting. And, as shouting in someone's face is rude, so is shouting over the Internet. So, unless you are purposely yelling at someone (which really isn't such a good idea), always make sure your Caps Lock key is off.

- Check the FAQ First; If you are new to a Usenet newsgroup, always make sure you check that group's Frequently Asked Questions (FAQ) before posting a question. While you might think that you are the first one to come up with a question, chances are that other members of the

newsgroup have seen the same question many times before. When you post the question, it is a good idea to mention that you have already checked the FAQ.

- Don't post chain letters or the like; If you don't have a very good kill file, one of the first things you will notice in Usenet is the occasional appearance of a chain letter or a pyramid scheme. These are articles that will talk about how you can earn thousands of dollars just by adding your name to a list and sending \$5 to everyone else on the list. They are usually posted by some naive net user looking to make a quick buck.

In a word, they don't work! And if that's not enough, they are illegal in many countries. The only thing that will happen if you post a chain letter is that you will be ridiculed, sent harassing e-mail, and perhaps receive a nasty letter from your Internet provider.

- Keep signatures short; One way to distinguish yourself from the crowd in Usenet is to use a signature, which is a small text file that is automatically added to all of your posted articles. A

typical signature contains information like your name, your e-mail address, your home page (if you have one), and perhaps a reference to any hobbies you are involved with. But note that it's a bad idea to have your home phone number or address included.

In addition, try to keep your signature five lines of text or less, three should usually be enough. To create a signature, check your newsreader documentation.

In conclusion...

Over the last few issues we've seen a number of alternative uses of the Internet — the majority of which are all available to RISC OS users thanks to the numerous software houses and shareware writers who are actively developing software to ensure that RISC OS systems are not left "out in the cold" as many are led to believe.

I hope I've been able to give you some idea of what else is available though the Internet. **END**

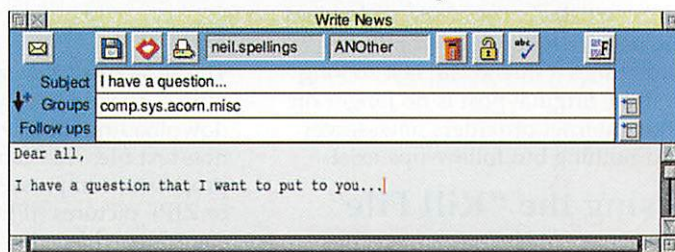


Figure IV: Composing an original posting for a newsgroup

Tick tock

One final little known use of Internet news I want to cover is the "news ticker". Those familiar with channels such as CNBC and CNN on satellite and cable will be familiar with the stock market "tickers" which scroll relentlessly across the bottom of your television screen displaying latest stock quotes.

This concept has now been applied to the desktop, with news items scrolling across your screen. The source of the news is the comprehensive BBC News Web site.

The screenshot shows the news ticker scrolling across the

top of the RISC OS desktop. Clicking on any of the news items as it scrolls across opens a Web browser at the page reporting on that particular news item on the BBC site.

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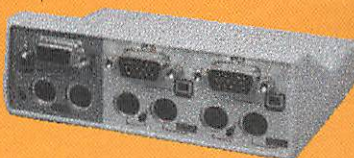
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Just browsing

David Dade continues his look
at RISC OS Web browsers

At the final fence, one of the remaining contenders in the RISC OS Web Browser Derby has fallen. *ANT Limited's* front-runner browser, roguishly named *Fresco*® at a time when its other-platform rival was called *Mosaic*, has been dropped from the desktop RISC OS catalogue. ANT and their sales and support agent Argonet have ended both development and support for the ANT Internet Suite, of which *Fresco* is a part.

All the more galling for existing and prospective RISC OS users is that *Fresco* remains ANT's core product in the embedded technology market for other platforms, where later versions are to be found in set-top boxes, Internet TVs and PDAs. The gaps in the desktop iconbar will no doubt be filled by others like outsider *Oregano* from Oregan Networks and R-Comp's *DialUp*, so there are still some good bets.

Writing on the wall

Before bidding *Fresco* farewell, let's look at how it has performed. The last version issued by Argonet Ltd was in December 1999, which included *ECMAScript*, a clone of the Javascript scripting language in *Netscape Navigator 3*, and 128-bit secure sockets layer used for online banking and shopping. This was a chargeable upgrade from earlier versions which had previously been

updated free of charge to owners of the *ANT Internet Suite*.

People who have used the *ANT Internet Suite* either love it or hate it. As supplied it is tricky to log-in with more than one ISP, which was the norm when it was first designed. Now that there is a plethora of providers, third-party fixes are required to effect multiple ISP log-ins. Since ANT's bug-fixing releases have dried up, a whole sub-industry has been developed by Argonet Support guru Paul Vigay to correct for Y2K and various other bugs in the Suite's components, and enhance its functionality.

Almost every part of the original *Suite* can be replaced with more recent third-party products. The *Marcel* e-mail and news client can be replaced by R-Comp's *Messenger Pro* or Jonathan Duddington's *Pluto*, the ANT dialler by *Socketeer* or *DialUp* also by R-Comp, and so on. *Fresco* itself can be used independently of the *Suite*, but some tweaking may be required for *Fresco* to find all the resources externally that it would normally get from the *Suite*.

Although *Fresco* requires the memory-resident RISC OS *Toolbox* modules to be present, unlike *Oregano*, it does not require the "new" Nested Window Manager. However, owners of pre-RISC PC machines with only 4Mb or less will find that *Fresco* soon runs out of memory. Configuring image loading

off by default, and using the toolbar button to re-enable only when required is the best policy here.

Fresco users will already be familiar with its little idiosyncrasies, like the "Type 5" crash that can occur when complex pages with many small graphics are viewed, or scrolled or resized while incompletely rendered. Often you subsequently lose your recent page history list, or it becomes unusable.

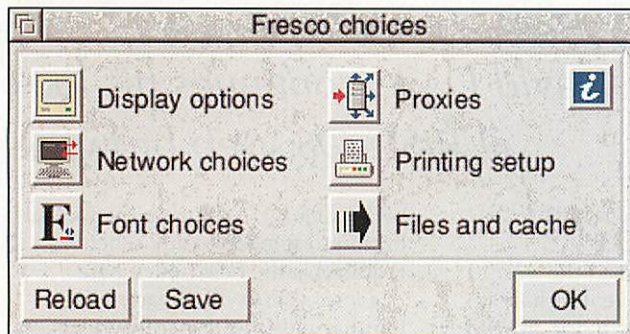
Another irritating but less damaging effect is an apparent freeze for several seconds while a complex HTML table layout is parsed. I find *Fresco's* infuriatingly flawed handling of page viewing history can sometimes trigger page rage to such an extent that I'm forced to switch the monitor over and reach for the wheelmouse...

Fresco renders most pages reasonably quickly and accurately but can be completely flummoxed by what is usually poor HTML or Javascript construction. It all comes down to how tolerant a given browser implementation should or shouldn't be to faulty code. Too many Javascript authors leave undefined variables lying around to trip up the less wary browser and this is perpetuated by too much cut-and-paste page plagiarism.

By default *Fresco* caches its own files, so if a Proxy server such as *WebServe* is in use on the same machine, it is sensible to turn local



A mosaic of *Fresco* renderings, to compare with *Netscape*.



Spoilt for Choices with Fresco

cacheing off in the Choices iconbar option. If you want to save visited Web sites to disc, the erstwhile ANT product *Webtool* integrates with *Fresco* to save complete pages from the button bar. To do this with a freeware utility like *Cacheman*, the cache must be turned on and local proxying turned off to save wasteful double cacheing. Have a look also at *WebGet* for a "giftware" site saver (www.ping.demon.co.uk/acorn/webget.html)

The test sites used last month, uk.altavista.com, www.bt.com, www.lloydstsb.co.uk and www.riscos.com are rendered pretty well by *Fresco*, but the Altavista site is one that tends to freeze the machine while *Fresco* works out the layout. If you re-size the window *Fresco* re-renders the page without re-fetching, which can be useful for sites that are designed to be viewed at a different screen size than you are using.

Fresco has no difficulty with the Lloyds TSB Internet banking site, and can carry out all secure transactions that are offered. *Fresco* always identifies itself as Mozilla, with various version numbers and various compatible browser and OS names that can be set using Paul Vigay's shareware *AntUtils*. The

HTML specification supported is 3.2, but *Fresco* also includes a number of *Netscape* extensions, such as table BGCOLOR background colours and mapping of FONT FACE = Courier tags to RISC OS Corpus (but

strangely no other mappings). But as the FONT FACE attribute is now deprecated in favour of Cascading Style Sheets which *Fresco* doesn't support, we're no better off.

Fresco's stability seems sensitive to the set-up of the machine it's running on. While some users report few problems, others have no end of trouble. Possible cures are to clear its cache in *!Scrap*, ensure there's enough free memory, check for other known software clashes and avoid poorly-written *JavaScript*. Useful information on all these remedies can be found at

www.vigay.com/riscos/inet/type5s.html

The list price of the complete *ANT Suite* is (or was) £99+VAT, and there must still be copies around the dealers. You may want to read on before making the decision to go with *Fresco*.

Herbal life

Oregan Networks were paid by Castle Technology to port their *Oregano* browser to the RISC OS desktop platform, so Castle are responsible for marketing, support and managing upgrades. Oregan Networks now call their original product *TV Interactor*, and emphasise

its elegant solution to the problem of clear text display on the limited resolution of TV screens.

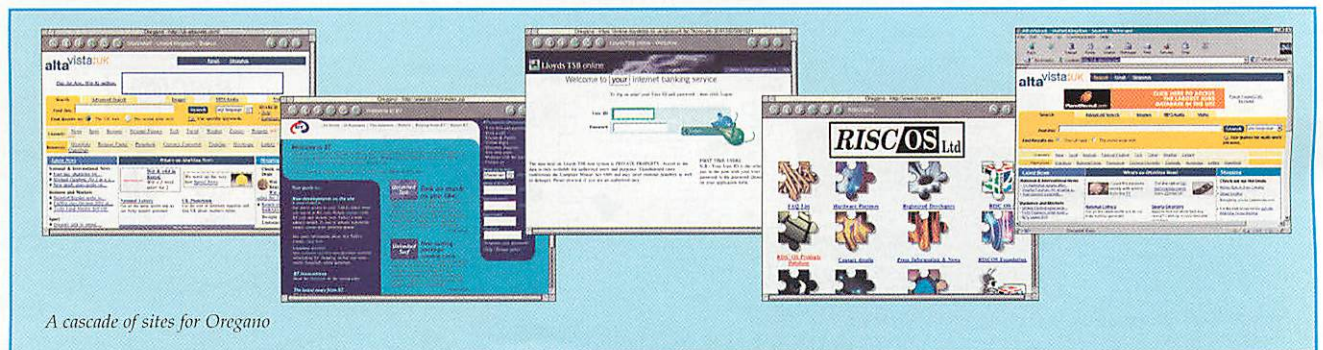
Rather than use the existing and exemplary RISC OS font manager, their solution has been to write a new font manager that can render the many *TrueType*© font files found on a *Windows* PC and on the Internet. I have to say that on a computer monitor, the RISC OS Font manager wins over Oregan's *XTTFont*. Perhaps Pace/RISCOS Ltd will extend the proper Font Manager to handle foreign font files.

The *Oregano* feature list currently includes HTML 3.2 compliance combined with some CSS (cascading style sheet) support, which is really part of the HTML 4 specification. Many expected features for a front-line browser are provided, such as full *JavaScript* support, frames and tables, PNG image rendering, SSL 3.0 40-bit and 128-bit secure socket encryption. *Oregano* requires RISC OS 3.5 and above, so older machine owners will miss out.

Getting Started

Oregano is supplied on a CD-ROM which contains the Installer program, a PDF format user manual and some special offer advertising pages. What you receive on the CD for your money is actually only the demo version of *Oregano*, together with the cream of the freeware RISC OS Internet applications, replacement "new" Boot sequences for RISC OS 3.X and 4.X and other resources needed to create a working Internet stack and serial port connection.

To actually obtain the full version of *Oregano*, you have to install the



A cascade of sites for Oregano

demo version from the CD and use it to log on to the Internet and register online at the Castle Technology support Web site giving the CD licence number you have bought, and download the upgrade file which automatically updates your installed version.

This is actually quite a clever system because it means the *Oregano* CDs on dealers' shelves never actually go out of date, as long as the demo version that is on them is capable of being upgraded. There are some drawbacks in that the resources in the installer program can go out of date as new modules and versions of the other software included are released.

You are offered three installation choices. *Just Oregano* installs only the browser and its resources for you to use with an existing working Internet installation such as the *ANT Suite*. *Get online with Oregano* additionally installs the freeware *Socketeer* dialler, preset for a public-access account with BTClickFree. The *Full Internet Suite* option installs *Oregano*; *Socketeer*; *FreeTerm* telnet client; *FTPc* ftp client; *Messenger* with *Newsbase* e-mail and news reader; *POPstar* and *Newshound* mail and news fetchers; and a selection of Internet tools such as *FreePing* and *AcornICQ*.

You can either use the preset BTClickFree account for the full installation or open a Freeserve

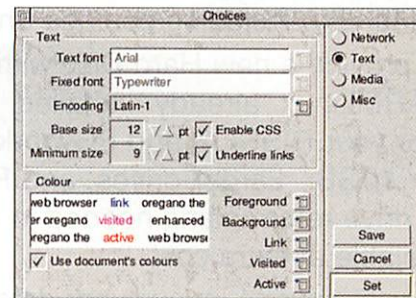
account following the included account-creation instructions. Although I chose the *Just Oregano* option, the installer irritatingly downgraded some of my existing Internet modules and plug-ins so that my machine would not start up properly. Castle are now aware of this and should be refining their installer.

Bouquet Garni

The first half of the PDF manual supplied deals with setting up the extra software, and considering the vagaries of all the items supplied in the full suite, is quite an ambitious undertaking. *Oregano* itself currently only has four configuration screens accessed from its Choices iconbar option: Network, Text, Media and Misc.

The Network configuration page contains the home page URL and proxy settings; Text sets font type and link colours and enables CSS; Media controls image display options and Plugins, and Misc deals with *JavaScript*, browser faking identity and Skin. There are already many third-party "Skins" or decoration schemes available to customise the appearance of *Oregano*.

This "Skin" feature stems from the embedded technology birthright of the design. An *Oregano* GUI Editor is available from the Castle Web site which allows other *TrueType* fonts to be installed. This is of limited use



Oregano's flavour of settings

in the current version because apart from the ability to change font decoration in Cascading Style Sheets, the font face displayed in Web pages remains fixed.

I will not dwell much on the page rendering successes and failures of the current version of *Oregano* as reported in the very active *Smartgroups* *Oregano* mailing list at www.smartgroups.com/groups/oregano. John Ballance of Castle Technology told me that there are considerable forthcoming changes in the code in the next version due out before Christmas, and no pre-release version was available in time for this article.

The next implementation will be faster with most of the already-reported problems corrected. Other planned changes and resource moves will also speed things up.

In spite of this news, *Oregano 1.10(js)* was quite successful at rendering all of the test sites, and was fully able to carry out Internet banking at Lloyds TSB, even when set to identify itself as *Oregano* on RISC OS.

Its current lack of page caching means that using *WebServe* (if you have it) as proxy is a page-reloading time saver, and Colin Granville's *FTPc* is useful to handle pure FTP URLs. Castle can provide an unsupported version of the *Navaho* server which can also act as a cache for *Oregano*.

A feature I hope for in the next version is a persistent history list, so that next time you run *Oregano* you can see links that have already been visited. What we are getting with *Oregano* is a useful and interactive dialogue between the developer and the user that should reap benefits for everyone.

END

Sites and resources

Product: The ANT Internet Suite
Price: £99 plus VAT
Supplier: Try your local dealer

Product: AntUtils
Author: Paul Vigay
Web: www.vigay.com/riscos/apps/antutils.html

Product: WebGet
Author: Joseph Heenan
Web: www.ping.demon.co.uk/acorn/webget.html

Product: Oregano
Price: £49 + VAT
Supplier: Castle Technology

Tel: 01728 621179
Web: www.castle.org.uk/orgdemow.htm

Product: Oregano GUI and Font Editor
Web: www.castle.org.uk/Support/Oregano/GUIEd.zip

Product: Navaho (proxy server and cache)
Web: www.castle.org.uk/Support/Oregano/Navaho124beta.zip

Oregano mailing list
www.smartgroups.com/groups/oregano
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www.drood68.freeserve.co.uk/Oregano/

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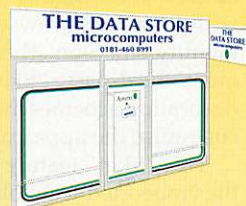
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Eye for music

Philip Perry captures music in a new way

Graham Jones the author of the highly regarded *Sleuth* OCR package (Optical Character Recognition — scanning text into your computer) has now developed *SharpEye*, a program which allows the same trick to be performed with music. In a nutshell, *SharpEye* is an optical music reader (OMR) for RISC OS computers. It takes directly scanned or saved sprite images of a musical score as input and after processing, outputs a file in a choice of formats: *Professional Music Scribe* (PMS), *Rhapsody 4*, MIDI and/or its own native file type.

SharpEye requires RISC OS 3.5 or better on a machine with at least 8Mb of RAM (16Mb+ recommended) and preferably a StrongARM processor. The job it undertakes demands considerable computing power — machines with other chips are perfectly OK, they just take a little longer. Also, a scanner and the Twain interface are needed to capture the images of printed music directly but sprite files saved to disc can be loaded into *SharpEye* by drag and drop to the input window.

User interface

Two windows provide *SharpEye*'s principal user interface one to display the input sprite and the other (where most of the users time will be

spent) for editing operations. These windows are linked so as to provide a view of the area of the input image which is being edited in the Output window.

In 'editing mode', symbols are selected (turn red) with Select, inserted with Adjust and removed with the Delete key. Context-sensitive panes of symbols are attached for use with the above actions in a way somewhat reminiscent of *Rhapsody*. Multi-page scores are probably best handled by appending the pages in the editor and then correcting the complete score as one unit. The 'joined' pages can be saved in *SharpEye*'s own format for further editing at a later time but take care, pages once appended cannot be spit again — there's no divorce (at present).

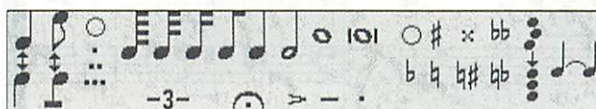
First movement

Sprite images may be directly scanned into the application (using Twain) or previously created sprite files can be loaded by dragging to *SharpEye*'s Input window. By default the whole page is converted, alternatively, zones within the image can be isolated (by drawing a select box) for processing. Once the page image is loaded the conversion

process is started by selecting 'Read' from the input menu.

Black and white sprite input (one bit per pixel) scanned at 300dpi works best. A somewhat higher or lower resolution may be useful with unusually small or large scores. Achieving a good quality input image is essential for smooth conversion and hassle-free editing.

The 'Tips' section at the end of the manual gives helpful advice on



The toolbox for the output edit window

this. When we (humans) read a music score it is easy to forget the amount of knowledge and understanding we bring to the process of interpreting the image. It's amazing how well *SharpEye* copes with these challenges.

As mentioned above, generous helpings of megabytes and megahertz will speed the conversion from print to computer data, particularly for complex scores.

However, don't be put off if you (like me) do not have the latest and fastest model — *SharpEye* does its processing in the background allowing the user to get on with other work in the meantime. A small 'work in progress' window keeps the user up to date while conversion is taking place. As a bonus, *SharpEye* also understands text and converts lyrics along with the music.

Variations on a theme

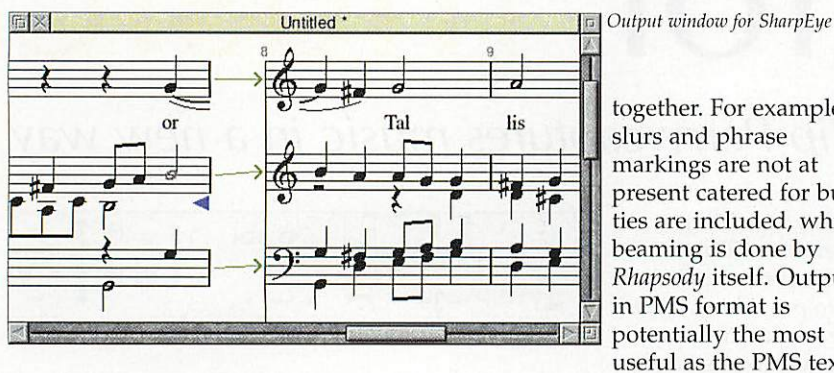
Once conversion is complete *SharpEye* opens the Output window with a view of the processed score. This window is linked to the Input window so the Output window mouse position is traced to the Input window, thus aiding cross-referencing when editing. Attached to the Output window is a context-sensitive pane of editing symbols.

This is one area where I found the user interface not entirely straightforward and intuitive. That is, basically, I had to "Read The Manual" and put in a little practice to develop a fluency in editing, it wasn't that hard really! *SharpEye* prompts you (with blue triangle symbols and greyed notes) at points in the output score where it thinks something does not add up.

Both of these can be seen in the illustration of the Output window where I've introduced a half-



The input window with the scanned image



note/minim error. The editing panes provide you with banks of symbols to correct these anomalies – with differing sets offered depending on what item has been selected in the output score. Also, at the start of the score or page black rectangles allow you to 'associate' staves to help *SharpEye* understand the music, typically this might apply to the treble and bass clef of a keyboard or harp part.

Finale

MIDI output provides both a route into *Sibelius 7* (plus the PC and Mac versions) and to the many MIDI editor and player programs. The output from *SharpEye* is not a MIDI file ready for performance but rather the starting point for a dedicated MIDI editor to enhance or the bare 'score data' for transfer to a score editor. The MIDI format precludes the incorporation of much essential 'typographical' information and so is not an ideal medium of transfer but is a basic and universally recognised form.

With *Rhapsody 4* format *SharpEye* does not attempt to reproduce the original input layout. Also, some functions are not supported and others are left to *Rhapsody*'s own systems (sets of staves joined

file is an animal far removed from the intuitive graphic interfaces of other music editors. Some correction in PMS will probably still be necessary, however, *SharpEye* can save you quite a lot of typing.

SharpEye's native format is intended for use with the music editor for correction and storage of the processed scores prior to export in one of the above formats. It is somewhat limited in its formatting and display of music and is not intended for the role of graphic music editor in the way of *Sibelius* or *Rhapsody*.

From the documentation it seems the "home" format can be moved between platforms directly.

Sib7 to PMS

As noted above, it is possible to load sprites directly into *SharpEye* and these sprites don't necessarily have to be formed by scanning in music. It is possible to create a sprite from other sources with programs like *D2Spr*, *GhostScript* and *ReadPCL*. The original source for the image can be any music editor or drawing package. I've only used Andreas Dehmel's *ReadPCL* myself (available on the *Acorn User China* CDs under Stuttgart) but have found this method gives excellent results as it produces an input sprite of the highest quality.

The procedure is simply to print to file the source music score using a Deskjet or Laserjet printer definition (at 300dpi) and then convert the printout file to sprites. *ReadPCL* handles multi-page files, outputting Sprite001, Sprite002, and so on. These sprites can be loaded into *SharpEye* and the resulting output appended again in the music editor. There are rarely more than a few

errors needing correction as the input is exactly square and symbols entirely uniform. Having corrected any errors, export in PMS format.

Conclusion

As stated in the manual, there is the issue of balancing the quality of the input image (and resulting level of editing) against the time involved with simply directly entering the music manually into the destination package.

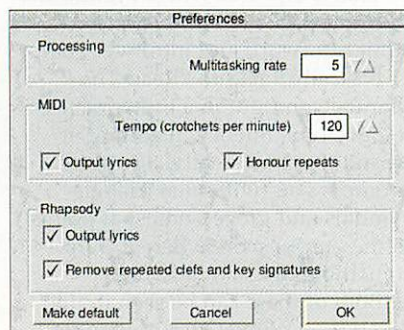
Hand-written scores are unlikely to provide satisfactory input images and at the other end of the scale the fine stave lines found in high quality published music can also cause difficulties.

Helpful tips for obtaining the best from *SharpEye* in this regard are to be found at the back of the manual. There are some other limits to what *SharpEye* can do, for instance, the handling irregular rhythms other than triplets and 'outing' hidden staves. However, with time and succeeding updates I expect most of these areas will receive attention.

While this package is of foremost interest to *PMS* and *Rhapsody* users, *Sibelius* owners can at least benefit from the MIDI export facility. For the wish list, output in *Sibelius* format would be a real boon but I imagine this is no small order. Something a little easier, perhaps, would be an input image queue system that could load, process and appended sprite-pages sequentially to form a complete, ready to edit score, in the background.

As a person involved in music and music typesetting, I have found *SharpEye* easy to understand and use, reliable and, most important of all, useful. With a price tag of £60.00 it is good value.

END



Useful but brief choices

Product details

Product: *SharpEye* (latest version 1.17)

Price: £60

Author: Graham Jones, 21e Balnakeil, Durness, Lairg, Sutherland IV27 4PT Scotland

E-mail: support@balnakeil.demon.co.uk

Web: www.balnakeil.demon.co.uk

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Are your assets **linked?**

Steve Turnbull looks at the revamped Web site creation tool SiteWriter

The first thing that happened when I installed SiteWriter (an easy two minute operation) pleased me enormously, then made me feel guilty as I thought of Sendu Balu's article on interfaces.

You see the biggest criticism of SiteWriter when it was first released was the fact that it had a PC-ish interface. Apart from the fact that this is guaranteed to annoy a lot of RISC OS users, there was the inherent naughtiness of having a different user interface to the rest of the machine.

Now I've never been a fan of iconising-to-the-desktop or iconising-to-the-iconbar. As a frequent Mac user I've always liked the double-click-the-title-bar-to-remove-the-window-except-the-titlebar-itself, I find it tidier and more intuitive.

Anyway it seems that Dan of Dansoft hasn't really relented on doing things a bit different with SiteWriter because the first window to pop up had a naughty new icon sitting on the titlebar — I clicked it and lo! the window disappeared leaving only the titlebar. I felt a little

glow of pleasure and tried double-clicking the title bar, and back came the window. Which is when the guilt began to set in.

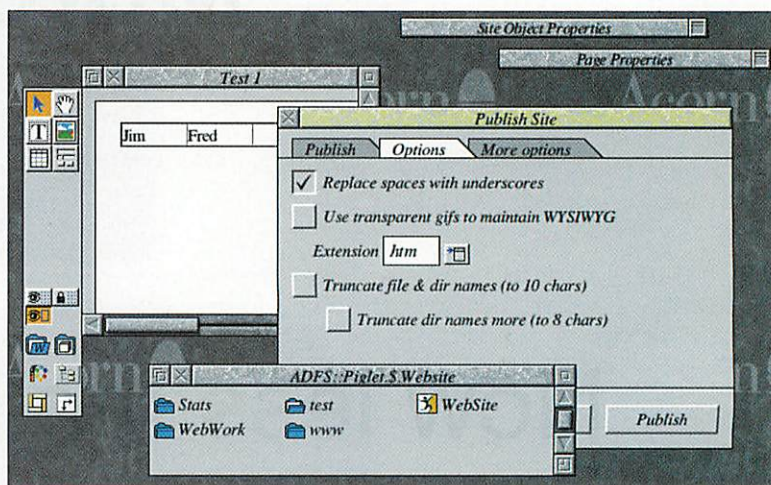
And the accusing finger started to point — because two windows appear at the start, the Site Manager and the Site Object Properties, the latter has the naughty icon while the former is perfectly normal. Thus we have a lack of consistency within the

application itself — Sendu Balu would not be pleased.

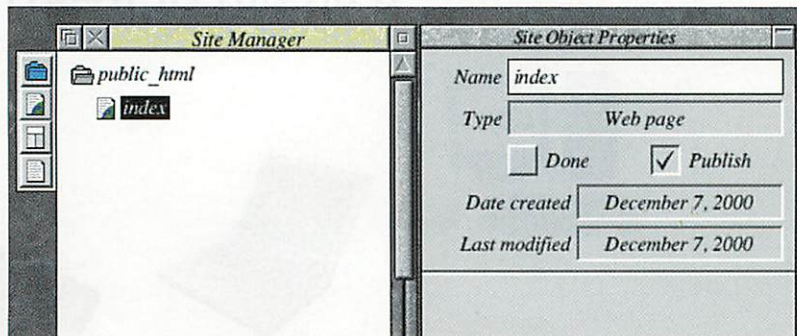
Creating sites

Anyway let's move on to the program proper. What we have here is a program designed to make it easier to create Web sites using a graphical front-end. We can't call it a WYSIWYG editor because different Web browsers display the same Web pages in different ways — but it does provide a graphical interface which should make it easier.

As a little change from the norm, I read the manual first — well it's a guide to getting started rather than being a manual, you do get one but it's on the disc. Probably just as well I did, the first step is actually to go to the Preferences dialogue and set up the directory in which various resources will be stored — you don't have to do it and there is a default, but I really think you should be

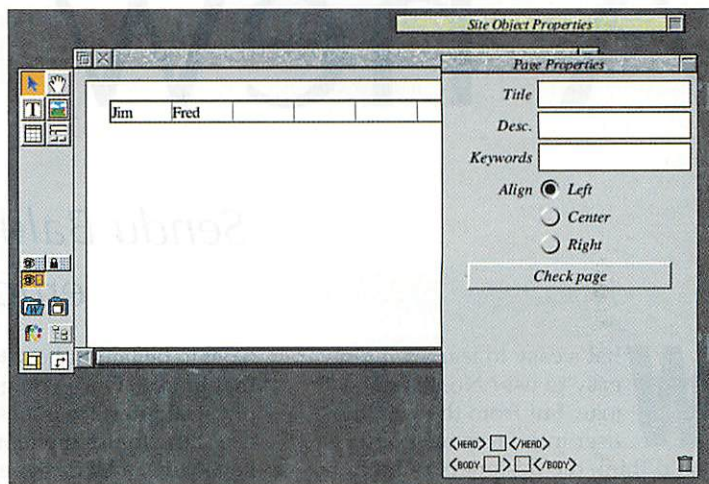


Publishing my simple site, you can see two naughty windows top right



This is where you start — notice the naughty icon on the righthand window, but the normal left window

You can control the properties for individual pages as well as entire sites, the page properties window also allows you to see whether your page is publishable which means it has no overlapping elements)



prompted for this as a first step rather than having to read about it.

Then it's wise to save your single-file Web site to the place you want to keep it, only one Web site can be edited at one time — which is not unreasonable.

Now my personal Web site has been designed to be fast, there are no graphics at all but a menu-like interface based around tables. I tried creating tables with *SiteWriter* in the style I used and it certainly looked quite feasible and would be faster than I was used to.

What you do is create pages and resources (assets) put page elements (like text and tables) in place and add links to your assets where you want them to appear.

The whole thing is put together quite logically although I think beginners might have a problem with some of the language in the getting started manual.

Publishing the site is simply a matter of choosing the target location

and telling it to start — Web pages are only created at this stage which means there is no messiness with links between pages when things are changed.

All the various windows and dialogues are quite self explanatory and I have no problem with the reliability of the software as a whole.

On the whole the program is reasonable to use, there are still those naughty misbehavings that really shouldn't be there. It doesn't matter whether the facilities provided by the RISC OS interface aren't what a particular programmer happens to want. It's vastly more important that the interface is standard and that there are no surprises round the corner.

Although *SiteWriter* looks much more like a RISC OS application than it used to, it still has oddities and inconsistencies (like the PC-style tabbed options — there are RISC OS ways of implementing them) which really detract from the whole site creation experience.

And there are spelling mistakes, don't you just hate them? At least one is in the messages file buried deep in the application, so that could be corrected easily but it just shows lack of thoroughness in checking.

There is still no

import of an existing Web site — it's no doubt really hard to do this but most people buying this product will already have some sort of site and if the program could even meet us halfway it would be a real boon. I have no desire to try to reconstruct my site, though I'm sure it would take a fraction of the time.

Conclusion

This has been a rather negative review and I really didn't mean it to be: the program works, it didn't crash and it can do what I want quite effectively.

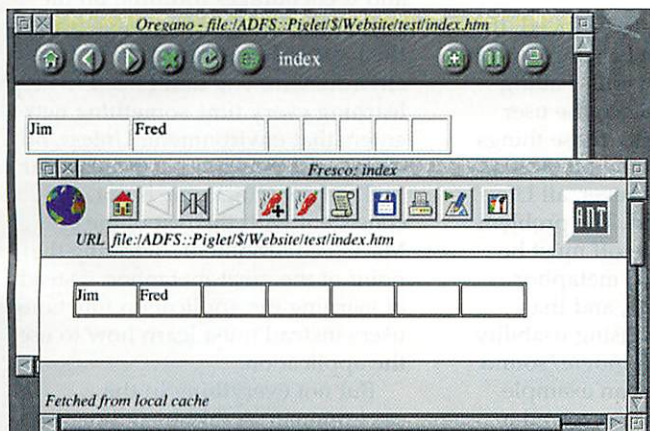
It's just that the program annoys me and that's the result of inconsistent design. If only Dansoft would stop playing games (wasting both time and programming effort) with the interface and just provide an application that works the way we expect a RISC OS program to work — then there would be no criticism at all.

What it comes down to is: Would I use it? In its first incarnation the answer was an emphatic no; now the answer is a equivocal maybe.

Take out the rest of the inconsistencies and the answer would be a resounding yes.

Product details

Product: SiteWriter
Price: £60
Supplier: Dansoft Developments,
PO Box 1955,
Leigh on Sea,
Essex, SS9 5BF
Fax (NZ): 0064 (3) 388 4362
E-mail: dansoft@dansoft.co.nz
Web: www.dansoft.co.nz



There's no WYSIWYG in Web design, only approximations

A new hope

Sendu Balu fights back against the evil empire of inconsistency

What's easy to learn but also easy to use? No, it's not a joke, but from the way most user interfaces turn out, you'd think the designers thought it was. If you've been following the series so far, we've already realised that the less interfacing the user does, the better.

We've even been smacked in the head with the obviousness of having large targets. And at the end of last month, UltraGUI was about to be born. I know you're all eager to find out if everything went well with the birth, but first a word from our Editor.

"RISC OS is not easy to use... if you're new to it", quoting an editorial published a few months back. I think what he was actually trying to say was that it's not easy to learn. It's not very 'intuitive'. Once you've got the hang of it, once you've been told all the secrets, I doubt even Mr. Editor could argue RISC OS is difficult to use. So to avoid the same criticisms, UltraGUI — or any interface — needs to be designed with both learnability and usability in mind. But what's the secret? I'll go into the details of usability another day, this month is all about learning.

Intuitive

If you've ever taken part in a discussion of why one OS is better than another, one word that comes up time and again is 'intuitive'. While no operating system can claim to be intuitive itself, what people mean is that the users are able to intuit — immediately understand without reasoning — how to use the operating system. In this sense, no OS yet devised is absolutely intuitive; even if you had a single button on-screen that said 'Magically do all the work', a user would still

have to be taught how to click on that button. Once you get past the physical interface issues (teach the user how to use the mouse and keyboard), a UI designer needs to make the remaining conceptual interface as easy to learn as possible.

One of the simplest ways of doing this is to provide well written help text, but from an 'intuitive' point of view that's cheating. We want an interface that we don't have to sit and learn about. Rather, we just want to be able to use it. The secret? It needs to be familiar.

As a replacement for the RISC OS user interface, UltraGUI could look and behave identically and in this way be completely familiar to existing users. But UltraGUI must be all things to all men; it must be familiar to new users as well.

Familiarity, then, means constructing the interface around a metaphor that non-computer users can relate to, while perhaps sharing similarities with current designs. In fact the latter point isn't so important — if the metaphor is a good one the old RISC OS users will quickly master it no matter how different it is to RISC OS.

Metaphors

If UltraGUI is going to be loved, the metaphor used must be simple, clear and immediately obvious. Failing that, if you have to teach the user what certain things do, those things should be made memorable. If it were this simple, however, all UIs would be pretty good. The problem arises because a trade-off must be made between a good metaphor increasing learnability, and that same metaphor decreasing usability. Let's take the MacOS movie/sound player 'Quicktime' as an example.

Recently this player received a major make-over, transforming the

utility from a usable ugly-duckling into an unusable super-model. What happened? The people at Apple thought it would be great if the interface for the player looked like a real world object. They made it look something like a walkman or, perhaps, a portable television. What better metaphor for a movie player?

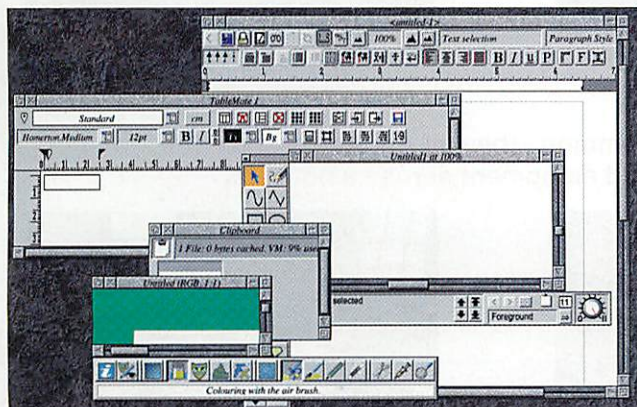
Looking at the utility, it's immediately obvious what many of the buttons are going to do. Everyone knows how the buttons Play, Stop, Forward and so on, work on a personal stereo, and there they are in the interface. Everyone knows that the dial increases or decreases the volume, and yes, the interface has one of these dials too. On the face of it, then, it's easy to learn (no learning needed, it's just like a walkman!) and surely easy to use. After all, who can't use a walkman? Unfortunately Apple took the metaphor a little too far.

Consistency

Of paramount importance in a user interface is consistency. Consistency allows the user to predict what will happen when an action is carried out. It allows methods learned in one area to be applied to another, and it encourages intuition on the part of the user. Once you've learned the basics of a consistent environment, you don't need to keep learning every time something new enters that environment. Unless, of course, the new item is inconsistent.

The new Quicktime is not consistent with the rest of the MacOS environment, defeating the point of the great metaphor; instead of learning the application functions, users instead must learn how to use the application.

But not everything in the environment should be uniform. A music player should be different



A cross-application consistent interface is essential to ensure the user is happy

from a painting program. With their different functions they ought to be entirely inconsistent.

So how does a UI designer know when to be consistent? The guiding principle is user expectation — things must be done the way users expect them to work. Finding out what user expectations are comes from user testing but there are some consistency rules that should never be broken.

Most important is interpretation of user behaviour. A mouse click should always have the same effect: activate the item under the pointer. It shouldn't, for instance, do nothing at all. Quicktime has, as decoration to sell the metaphor, pictures in the interface that look like buttons that might do something but don't. Users click these pictures. Nothing happens. Users get frustrated.

Also into this category falls keyboard shortcuts. It may be surprising, but consistency of shortcuts across all applications and the Operating System is one of the most important things that needs to be implemented. 'F3' as Save is pretty well understood in RISC OS. The copy/paste method is not. To this day I'm not sure what the proper style-guide way is, but as a user of *Edit*, *Zap*, *Oregano* and *Publisher*, I'm left clueless. Copying between these applications, or even within one, I invariably get the method wrong and have to re-learn

the correct one before I can carry on. Users get frustrated.

Next in the consistency hierarchy comes use of invisible structures. An invisible structure is any function that doesn't have an icon attached to it. The close icon in RISC OS has an icon, and clicking on it closes a

window. But Adjust-clicking carries out the 'invisible' function of also opening the parent window.

If there's one easy way to tell a new RISC OS user from an old one, it's that new users never make use of the right-hand mouse button. It's nigh-on impossible to intuit its function, but at least once you've been told about it ("Adjust does kinda sorta the opposite of Select") you can use it easily and everywhere. It's invisible but consistent.

MacOS has window edges that can be dragged to resize windows. Again, the function is effectively invisible, but once you know it, you can apply it everywhere. Except with Quicktime of course. Quicktime windows can't be resized. Dragging at the edge doesn't do what the user expects. Users get frustrated.

Next up, small visible structures — icons to you and me. These are ubiquitous features — a close icon on a window as opposed to a specific button of an application — a painting program won't need a music program's play button. This means if one window that users might want to close has a close icon in the top right hand corner, all windows that users might want to close should have the same close icon (size, shape, colour and so on) in the same place

This allows a user to learn how

to close a window once, then apply that knowledge to all other windows. Except for Quicktime windows, which don't have the usual MacOS window-manipulation buttons. No close icon. Users have to learn how to close Quicktime windows when in all other cases they don't even have to think about it. Users get frustrated.

Taking third place is the "design consistency" of a particular application. So once you've made sure everything is consistent with the above two points, it's good to make sure all the parts of your interface look like they came from the same mould. This lets a user know that a new window that pops up belongs to the same application being used. It allows the user to intuit that anything that had to be learned in one window of a new application will work in a secondary window.

Finally we have platform consistency. Remember that this doesn't mean a new application shares no similarity with any other application just because I'm placing this point last. That said, a music application should be distinctly different to a graphics application, reflecting their different functions. But because the design is also consistent with user expectations, critical features will be shared with all other applications and users will be happy. They will already know how to deal with a large part of any brand-new application interface.

A baby boy

Still with me? Well as a reward I'll finally tell you about UltraGUI. Blue eyes, 4 pounds 7 ounces, consistent where it counts with a flexible metaphor that allows him to adhere to Fitts' Law. A very healthy young lad by all accounts. But I know you want details. What does he look like? How does he behave? Patience, dear reader, patience. Come back next month and all might be revealed.

END

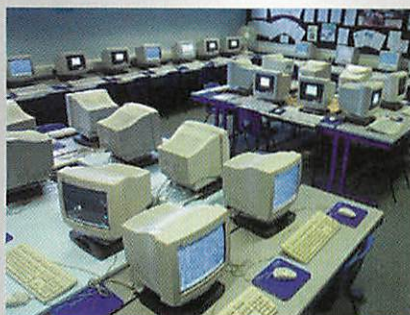
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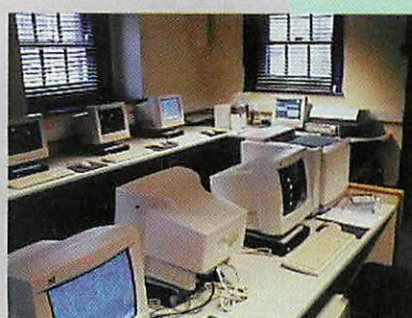
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Anglia getting even better

Pam Turnbull finds even more news than usual

Though now part of the all-encompassing Granada Learning, Anglia Campus continues to plough its own very successful furrow. If you're not a subscriber pop along for a free trial and see some of the new additions to the site – www.angliacampus.com

For parents, there is a How to Help section and a new addition explores the complex issues that surround a child's disruptive behaviour in school. As well as examining the causes of disruptiveness, such as educational difficulties or relationships with staff and students. Entitled *Improving your child's behaviour* it also shows parents positive ways forward in addressing the problem.

Also new to the site is ScreenCampus, dedicated to the world of film. If you're writing about film as part of your studies, or you want to know which film

version will help make that tricky English text a bit clearer, then head to their Case files and Film reviews for some extra help and guidance. Each week you will also find the latest film news and UK top 10 box-office figures, offering you the chance to win UCI cinema tickets.

Then look out for the monthly events or challenges. At present there's a cartographic adventure through history which will test just how good Key Stage 2 and 3 students really are.

Created in association with English Heritage, there are map puzzles to solve and then a story, poem or historical report to write in response to an ancient place they've visited, or would like to

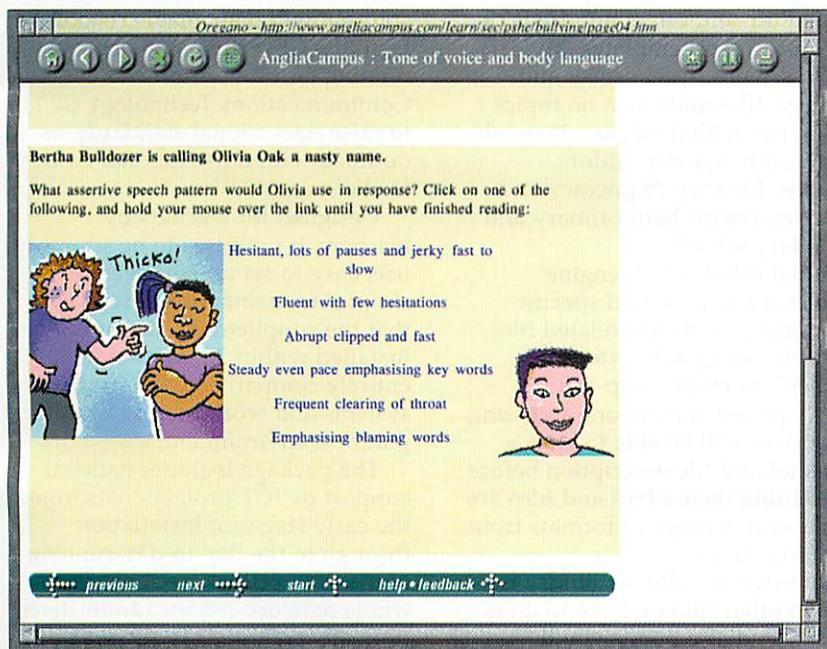
visit. The best entry will win a digital camera.

For primary teachers, a new Key Stage 2 Primary Music unit is on hand called Setting the Scene with Music looks at how music can be used to create certain moods in the listener. Children watch the same short film, are asked to listen to four very different pieces of accompanying music they can then see what makes them smile or cry.

Moving on to secondary level, just what do you know about *pathetic fallacy*? You'll find the answers in Analysing Fictional Texts 1. While Analysing Fictional Texts 2 analyses how authors grab the reader's attention at the start of a novel or short story, moving on to examine characterisation, dialogue and dramatic tension.

This new series of three units for Key Stage 4 is designed to arm students with the techniques and the terminology they need for the analysis of novels, short stories or unseen texts. Staying with Literacy, the third unit in the English Grammar series is now available providing a series of interactive exercises to test and reinforce knowledge of adverbs, master adjectival and adverbial phrases, as well as constructing complex sentences by using conjunctions.

Another new section is PHSE and the first unit shows how assertiveness theory can help students cope with bullying behaviour. Body language, tone of voice and the way we deal with feelings can all influence the way we deal with bullies. Aimed at Key



Stage 3, students can learn how the bullied can fight back, without aggressiveness, in Assertiveness against Bullying.

Another good area to visit – if you haven't done already – is the Bimillenary timeline for a unique guide to this year in history.

Power to the kids

According to recent data compiled by MMXI Europe between January and September 2000, 2 to 17-year olds online grew by 88.9 per cent – 100,224 to 200,312 visits – with 8 to 11-year olds showing the biggest growth. Partly due to the PM's emphasis on getting children online, children now see this as a mainstream communication tool.

Among the more exploitative and telephone bill-hungry sites available for home and school are some gems. For instance, **atkidz.com** provides what they call "an holistic, targeted proposition for children, doing everything from connecting children to a safe, walled world on the Internet to offering a protected online environment where children can send e-mails, chat, enter competitions, play games and research homework assignments."

In essence **atkidz.com** is a one-stop shop featuring access to over 100,000 Web sites – all of which are personally checked and monitored by the atkidz team. What is more it is bright and colourful, child-orientated, and easy to navigate. For parents though it is their *dual layered filtering system* which may well prove more attractive.

This means that all chatroom and bulletin board content is first put through an intelligent software program which detects dubious words and phrases before being filtered through a real person – CM

or Chatmaster – who vets each message in realtime, blocking offensive messages and warning the sender who, if they continue, may find themselves evicted from the chatroom or the whole site. You can visit the site directly or install free, safe surfing software from the sites. It costs nothing other the cost of the local call while online and adults can use their existing ISP in conjunction with **www.atkidz.com**

Emergency resources

If you've ever needed information or ready-made files in a hurry then Computer Kids have a service which may interest you. Their *pick and mix* offerings allow you to take what you need whenever you want directly from their Web site – **www.compkids.com**. This keeps a tally of what you download and the school is invoiced later.

This library of ready-made files allows you to create topic banks of resources to suit a school's own curriculum and offers hundreds of word processor templates, My World screens, spreadsheet and database files and so on on topics as diverse as Shakespeare, Beowulf, Medieval monarchs, Tudors, Romans, Literacy, Numeracy and Greek myths for both primary and secondary schools.

A dedicated search engine enables teachers to find specific topic, age or software-related files. Each file, along with extensive teacher's notes and clip-art, is clearly priced and anyone accessing the service will be able to view a snapshot and file description before committing themselves and files are available in a range of formats from *Word to Textease*.

An extensive clip-art library is also on offer. All you have to do is register and as a bonus you'll

receive £5 worth of files completely free.

Anything to declare?

Staying with the Internet a new solution has appeared on the horizon called Passport2Learn and created by Ideal Hardware with a little help from Navaho Technologies, Cobalt Networks and Argo Internet Services. What makes this service different is that Passport2Learn offers a unique, specifically tailored total Internet package for education.

As well as providing completely controlled Internet facilities including e-mail and administrative services to assist teachers and students alike through better classroom organisation, and easy access to key learning sites.

Individual school Intranet systems can easily be created using the system allowing teachers to post timetables, school rules and other useful documents. The solution will help enable schools to fulfil the Government's demands relating to Information and Communications Technology (ICT) to raise educational standards, as outlined within its National Grid for Learning.

Designed for teachers by teachers, it promises to be simple to use, easy to set up and even simpler to maintain. So much so that the suppliers say that it can be installed within 20 minutes, is entirely compatible with existing systems and works across a multi-platform environment.

The package includes national support by ICT professionals from the early stages of installation through to the day-to-day running of the system. What is more the whole network can be administered from any computer in the school,

and the Web-based interface makes configuring and monitoring the suite simple, reducing the cost for teachers in time and work. Configuration can even be done from a remote location.

Full training on the total solution package is available from accredited vendors who have attended a one-day training programme. In order to address the concerns of teachers (and parents) of providing open Internet access to schoolchildren, Passport2Learn enables full control over Internet access with filters to prevent the downloading inappropriate material.

These filters allow teachers to choose which sites children can access, to limit the size of e-mails, and to control where the e-mails are sent and from whom they originate.

Currently being piloted at Sexey's School in Somerset, their head of ICT, Brian Stubbs, is pleased with what he's seen so far: "Every computer on our system has secure access to the Intranet and World Wide Web. Any pupil or member of staff may sit down at any computer and access their e-mail. The system is simple to set up and easy to manage.

"Passport2Learn makes IT a more interesting and stimulating experience, and provides an Internet solution which gives us all the control we need, as well as the freedom to explore technology." If you want to find out more ring 020 7375 3633.

Oxfam collaboration

Anglia Multimedia (01603 284148) and Oxfam have teamed up to produce *Wake Up, World!* With accompanying teacher's notes, poster and Web links, the theme is a day in the life of eight children

from different parts of the world. The disc breaks down into six topics each of which features a documentary and interactive modules – such as organising data and cloze-text activities.

For instance, *Places* shows where each of the children lives, locating the countries on the world map. While *Homes & Families* illustrates each home, showing where it is situated, and what it looks like inside and out. Or you can *Play* with different toys from around the world, experience the *Clothes & Weather* in the diverse climates. Then you can look at the *Food* or visit the *School* allowing children to compare and contrast what is taught as well as the physical features of the buildings.

This CD-ROM is based on the book of the same name penned by Beatrice Hollyer, providing Literacy, Numeracy and Geography activities for Key Stage One and narrated by actor and presenter Tony Robinson, who even travelled abroad to visit two of the children featured on the disc.

Making the most of IT

The US government has set up a commission to ensure that students make the best use of the Internet and have full access to the Web and other digital technologies. The 16-member Congressional Web-based Education Commission has called for a "national inventory" of access to technology.

This would examine the progress made in wiring up schools in the four years since the cut-price telecoms and cabling "e-rate" was introduced. The commission said the information was needed to devise strategies to tackle what is known as the digital divide. There are serious concerns in the States

that there is not equal access to Web-based learning and that the differences are widening.

At the top end there are five new key targets to be met: all students and teachers will have access to state-of-the-art information technology in their schools, classrooms, communities and homes; all teachers will use technology; all students will be technologically literate and responsible cybertizens; research, development and evaluation will shape the next generation of IT applications for teaching and learning; education will drive the e-learning economy.

However, research from the National Centre for Educational Statistics reveals only 10 per cent of American public school teachers feel "very well prepared" to use computers and the Internet in their teaching; 23 per cent felt "well prepared", while 53 per cent felt "somewhat prepared" and 13 per cent "not at all prepared".

Developing ICT

At the G8 Summit in July 2000, Japan identified IT as vital to the success of the *Global Society*. The other members of the Summit then called for the private sector to do their part in aiding the developing world in this area. And now Blue Circle, with Granada Learning, have initiated IT Nigeria 2000.

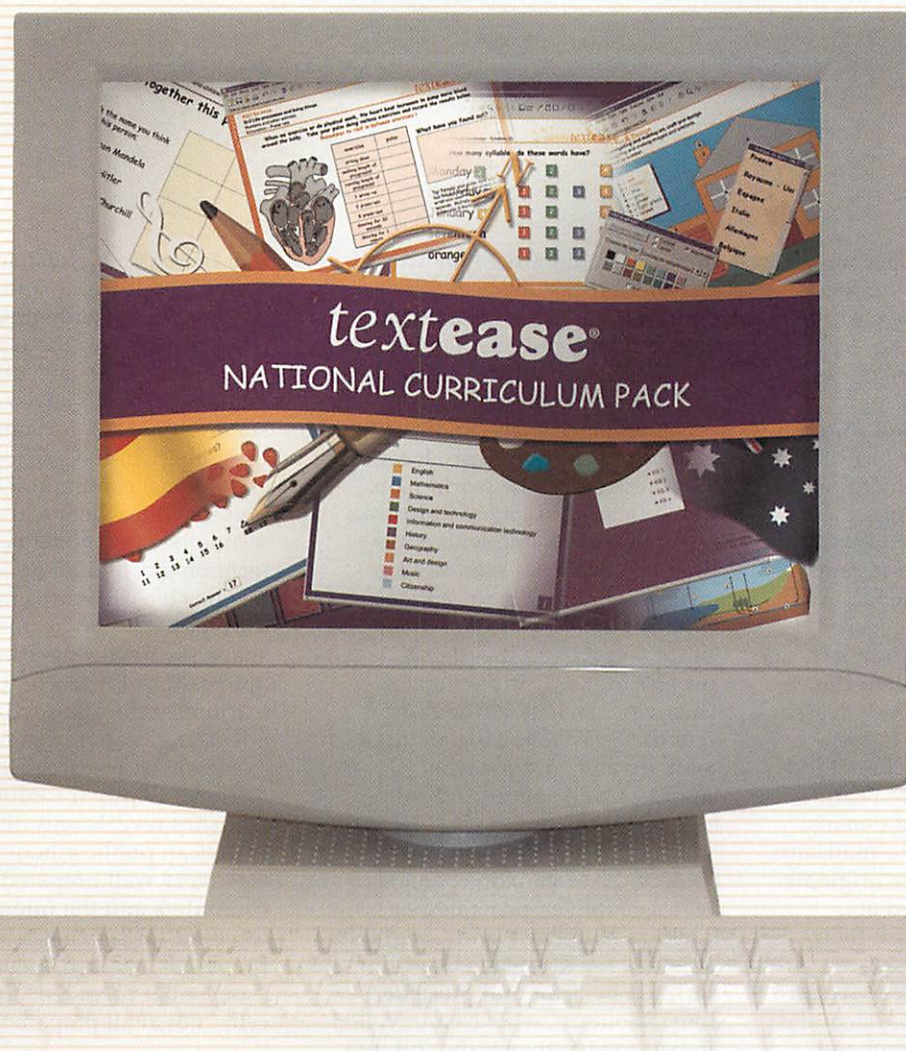
The plan is to build and equip two IT learning centres in remote areas of West Africa for the whole community to access.

Roger Hurn is heading up this project and has already visited the country. Two centres should be running by Spring 2001 providing a dedicated 24-hour a day ICT drop-in centre for the states of Gombe and Ogun.

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Secret societies

Richard Skegg guides you round his mystery machine

One of the best-kept secrets in the RISC OS world is the Network Computer (NC). These small black boxes is one of the ways that RISC OS is remaining alive and kicking in education.

The origins of the NC go back to when Acorn became involved with Oracle and drew up a reference design for a computer that could operate over a network without a hard disc. Clearly RISC OS is an absolute winner as the operating system is contained on ROM. When Acorn became involved with Apple and created Xemplar the NC was taken over by the new joint venture. Later when Apple dropped the Acorn connection the NC division separated as Precedence Technologies under Dr Stephen Borrill which took over all the NC commitments of Xemplar and has been developing them ever since.

Just what is an NC and how does it operate? More accurately it would better to talk about an NC system as they are not stand-alone units — they really need a network with a server although it is possible to run one off a Zip drive or CompactFlash card.

At the secondary school site where I am Head of ICT the

hardware, apart from the NCs, is an NC server using a Simtec CATS server running NetBSD, a Unix variant. I rarely need to touch the NetManager or directly access the server at the console; not out of lack of interest but because the Net Manager software supplied does just about everything that is needed. I do use it to access the hotfixes supplied by Precedence from their Web site but even that can be run from one of the NCs acting as a terminal.

The NCs are powered from a separate 16v power supply. The ones supplied by Precedence come with 16Mb RAM, PS2 keyboard, PS2 Mouse and mouse mat, 15in monitor (or optionally with 17in monitor), network patch cable, headphones (with volume controls) and a headphone adaptor (with spare connector for a second headphone).

The complete price is £370 each.

For pupils the system appears to be simple. Most operations take one click because most of what they see are

HTML pages. When a pupil logs on they are taken to the home page which provides simple HTML links to different areas. For example one click on the Internet icon takes them to a URL page; enter the URL for the site or go to Favourites for a list of bookmarked sites and off the pupil goes to the site. The NetManager, as mentioned earlier, acts as the web proxy server. Using part of the management software allows undesirable sites or strings within a URL to be blocked easily and very effectively.

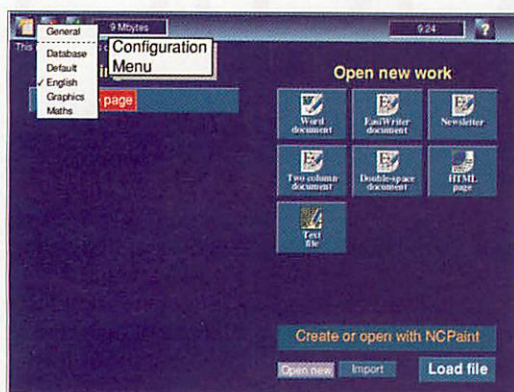
One of the main features of the NCs is the integrated nature of the NCWorks suite. It covers all that is needed at least up to the end of Key Stage 3.

All of the applications are being continuously developed. One click on the NCWorks icon takes the pupil

What you get with NCWorks

Component	Description
NCFresco	Specially enhanced version for <i>NCWorks</i>
NCWriter	Based on <i>EasiWriter</i> it can read and write <i>Word</i> files, HTML, text and, unsurprisingly, <i>EasiWriter</i> files.
NCBase	A variant of <i>DataPower 1</i> with all its functionality.
NCDraw	A close relative of <i>Draw</i> being able to read and write <i>Draw</i> files but more closely resembles <i>OakDraw</i> .
NCSheet	A spreadsheet which is based upon <i>Schema</i> from Clares.
NCPaint	Although it will accept sprite files this is a fully functioning painting package with a wealth of tools and effects.
NCGraph	The graphing and charting program, which integrates with <i>NCSheet</i> and <i>NCBase</i> , is based on the graphing program found in <i>DataPower</i> .
NCFiler	This provides the simple point and click HTML access to the files.
NCSwitcher	This integrates all the parts of <i>NCWorks</i> . It provides the control and access to documents and creation of new documents
RISC OS	Allows switching into RISC OS at any time and offers access to <i>NC Clipboard</i> for transferring of data between RISC OS and <i>NCWorks</i>





to the NC Switcher page appears.

Contains all of the NCWorks applications, some of which appear in different guises. For example NCPaint appears as a Sprite, GIF or JPEG painting program. The degree of simplicity of use is very reassuring. I was training some members of staff on using the Internet using Netscape Navigator and attempting to cut and paste text and graphics into a document. They and I became very irritated with Netscape's method for doing it. I switched them over to NCFresco and used it, and NCWriter, to copy and paste both text and graphics from Web pages. By common consent the staff found that much easier to use.

Creating a new document is done very cleverly. Inside each pupil's home area there is a directory called Files. Inside Files are number of directories; one for each application which has its own template file.

When the pupil creates a new document the template is copied into the appropriate folder in the home area and given the new name; the application loads onto the NC and then loads the new document. The upshot of this procedure is that the pupil loads a named document and when it is time to save there is no problem as to where to save it to; by clicking on the Save icon it is saved directly

back into the home area. It's a much safer procedure than MSWindows or RISC OS for young pupils or even members of staff. It's possible to create new template files for different subjects covered. In fact the NC Switcher can be configured to display just a set of icons or templates.

Clicking on the desktop icon takes pupils to the RISC OS desktop and Figure 1 shows the structure. From the desktop pupils can access their files either from the NC Server, if it is acting as the file server, or from an NT box.

It is also possible to use a Linux-based file server with the advantage that long file names can be used. To the pupil the whole process is transparent. They have no idea what type of server their files are on and that is as it should be.

The RISC OS software is held on the NetManager too. Again the server is transparent to the pupils; applications appear as a normal

not have a floppy drive it is necessary to have access to at least one RISC OS computer with a floppy drive and a CD ROM drive. The correct access must be set on the all files or else the pupils cannot read them. The only real

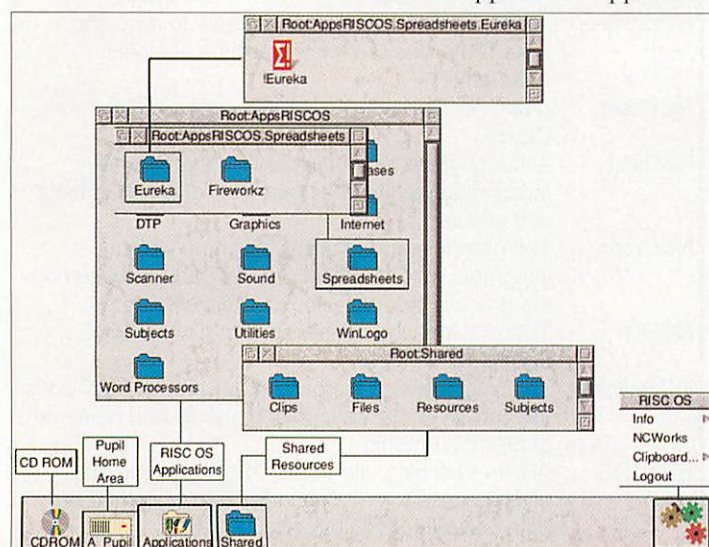
problem that I had installing a piece of software was with Impression Publisher. I attempted to install the network version but due to some exotic protection method CC used it would not function over the NC network.

It was only looking at the Technical Hints on the Precedence Web site that pointed out that I should use the stand-alone version. I did and it has worked ever since. Even Datapower 2 with its quirky protection system can be installed.

It's possible to add a variety of other icons to the bar. The flexible system allows any icon to have any text underneath it, to be placed anywhere and to perform any action. Setting up is a matter of adding a single line to a file in the boot sequence and there are full instructions on how to do this provided. The resources folder is great for holding clip art and any transitory items such as files that you want pupils to share.

Both RISC OS and MSWindows can access the CDs. The NetManager has a very clever CD-ROM copying system. If you want to make a CD-ROM, that you have a site licence for, accessible to all pupils it is only a matter of placing the CD-ROM in the drive on the NC Server, issuing the necessary command and the CD-ROM is copied extremely quickly.

It creates an image file and it is this that the pupils access. Serving such a CD across the network is not a problem, at least not on the RISC OS side. Commonly used RISC OS applications can be made operate in a similar way to the ones in NCWorks. Install the RISC OS application on the NC server in the boot sequence. Create a template file



RISC OS apps. Nothing esoteric has to be done to make it appear or function. Adding new RISC OS applications and putting files into the shared resources is straightforward. As the NCs do



for the application and store it inside the application. Finally, use an application *NCApps* and the RISC OS application will appear on the RISC OS application HTML page next time the NC is booted.

Other areas available are e-mail. This can be handled internally on the NC server. It has very good content filtering and is Web-based. Precedence now offers an e-mail system that I think almost any school can afford.

It is done across the Internet so is accessible from anywhere in the world. It costs £100 for primaries, £150 for middle schools and £200 for secondaries.

This is for all the pupils and staff in the school. It integrates directly into the NCs and is totally transparent in use. It has content filtering so if a pupil tries to send a rude e-mail it will be bounced back to the administrator and appropriate action can be taken. Similarly all inbound mail can be checked.

The software used to manage the NC server and the network is *TotalBoot* and *NetManager*. One of the big advantages of using this combination is that you can literally just plug a new NC into the network and it's there ready to go.

The server automatically accepts the new NC. An IP address is assigned without any user intervention. Nothing has to be done

on the server to add it. From the initial administration page the boot sequence, Web pages, printers can all be edited.

Printing and the setting up of printers is done through *PrintRoom*. This is an application developed by Precedence to take the headache out of setting up printers on the NCs. It allows the printers to be configured either on a per-NC basis or on a grouped basis in other words one can have multiple printer configurations.

I have NCs set to print to just one printer in a room without the printer on the iconbar but it is simple enough to make the printer appear and allow the pupils to choose the printer that they want to use.

One of the most tedious jobs is setting up users and installing a new system in a large school can be very daunting, Precedence have created a hotfix that allows the administrator to take a SIMS file (Schools Information Management System) and use that for creating new users and groups or deleting them. If there are real problems the NetManager can be remotely managed via a modem or Internet by Precedence or one of its agents, such as Surftec.

Serve and protect

The NC server is quite an interesting beast in itself. It can support PCs and Macs in addition to RISC OS. On a PC it appears as an NT file server, for RISC OS desktop machines it appears to be Level 4, without the problems, and for Macs it looks like AppleShare.

So if you have a variety of

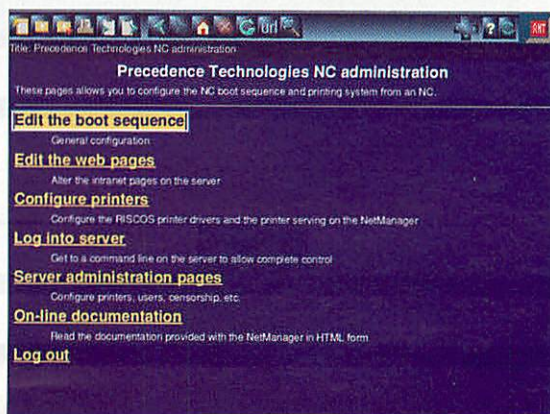
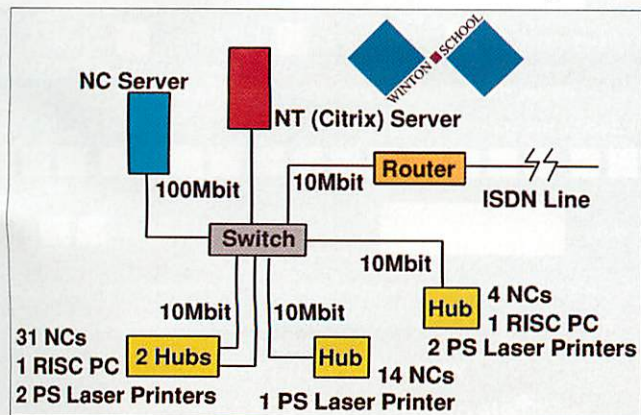
machines this could be the answer. As the server is Unix-like there are no quota management or licence charges — unlike NT. After the collapse of Acorn and Xemplar's withdrawal to selling only Apple products I was concerned with the production and repair of the NCs. Reflex Electronics can carry out all the repairs needed. The production of NCs is intriguing. There is a brand new NC now being manufactured in the Far East. It is a completely revamped version with a new, smarter and heavier-duty casing; the motherboard has been redesigned as has the network card.

This is a serious commitment by someone, somewhere in the world as such development is not cheap and would not be done if there were no future in the NCs. These are being produced in bulk and not for the UK market — long may it continue.

As regards support both Dr Stephen Borrill of Precedence Technologies and Surftec have been first rate. A simple phone call is all that is needed to obtain any support, I wouldn't say any time of the day or night, particularly not night, but it is very readily available.

If the problem cannot be solved immediately either one of these two will find a way, if it's humanly possible, to solve it. As they produce the package and have access to the required source codes, they are ideally placed to expand and support the product.

Richard Skegg is Head of ICT for Winton Secondary School, Andover, Hampshire



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RISC OS

Rambles

Mike Cook puts his walking boots to one side

No rambling this month, we're already sitting in the pub by a roaring log fire so it's over to Don Scott who has something to say to Michael McConnell who wanted to run his A4 laptop from a 12 volt source as described in the November Rambles.

I"As I have used an A4 from a 12V vehicle battery for a few years I have a few suggestions. Firstly the A4's internal battery pack consists of 12 Cs (Sub C) size 1.7Ah Ni-Cads giving a nominal 14.4V. Despite this the A4 continues to work down to between 10.5 — 11V thus operation from a 12V battery is OK, but you will not be able to run it down as far as in other applications.

"That said I have run an A4 from a 60 Ah car battery for four days continuously without any kind of recharging, so it is not too bad. There is no need to try to connect up through the battery connectors, you can go in through the 9-way power D on the back (pins 4 and 9 0v, pin 1 +12v). The only thing to note is that after setting the machine running on an external 12V supply you will need to unplug the internal 14.4V pack otherwise the A4 will run this down to 12V first, thus virtually exhausting it!

"There are no regulator dissipation problems, when the A4 is running on its mains pack it puts

in 20V onto the regulator while a separate output charges the Ni-Cads from a constant current source. It is possible (with care!) to open the battery packs and replace the Ni-Cads. Usefully, Cs size Ni-Mh batteries are now available which are much less prone to "memory" effects and are 30% higher capacity (2.2 Ah) which give nearly four hours battery life"



Guido Avidano is doing sterling work interfacing motors but wants to move faster:

"I read very often your articles in *Acorn User* and for this reason I think you are the right person to ask to. My small project is to drive a stepping engine under RISC OS 4 (via the parallel port), using an external board with an L297 and a L298N chips fitted on it.

"The problem is to control the speed (3.5~4.9 turns/sec. at the moment) at faster rates, without loss of precision. The question is simple: is it possible to improve this speed under RISC OS 4 without adding more hardware? If not, can you suggest me which kind of external timer I have to add, and how to drive it?"



The chips you are using are stepping motor drive chips so all they need is a pulse to advance the motor. You don't say how many steps your motor has per

revolution, typically this is between 48 and 200. So at your top speed you are producing pulses at between 235Hz to 980Hz, which is about the top speed you could expect from a BASIC program.

As I see it if you want to go faster you have two problems, producing faster pulses and accuracy. All Acorn computers have built-in counter timers and there are normally a few free. You can use one of these to generate a fast, regular, interrupt and then use the interrupt service routine to pulse your stepping motor every n times it is entered. Where the value of n will control the speed.


Of course this interrupt service routine needs to be in machine code but you can use a memory location to contain the n value that you can then poke values in with a BASIC program. The best thing I can do is to point you to my August 94 article in *Acorn Computing* "Chaos from a dripping tap" at www.doc.mmu.ac.uk/Acorn/BodyBuild/BB94.html

In this I used an internal timer to generate an interrupt and the interrupt service routine incremented a count that I then used to accurately time the intervals between drips from a tap. The software has most of the structure you want.

Your next problem is accuracy. All stepping motors have what is known as a pull-in speed, that is a maximum speed from a standing start. The problem is that the torque


drops off with speed and so the maximum speed depends upon the capability of the motor and the load it is under.

Therefore to get a motor to go at it's maximum speed you have to ramp it up. This is tricky to control in software, and it is also tricky knowing how fast is the maximum speed and how fast it should accelerate. Too fast and you lose accuracy.

 The previously mentioned Michael McConnel, a busy hardware builder, is having trouble with his PIC project: "I have been reading your articles on the new PIC16F874 microcontroller with a lot of interest but I have a problem — the PIC blows 1A fuses on power up. Not having access to the data sheets (until the AU CD-ROM is released) I do not know what power this chip requires. I have checked the wiring for shorts.

"So, What current does the PIC require? And can the 74HCT125 be placed on the same board as the PIC — I find I haven't the dexterity or patience to build it in to the 25-way D-Type plug?


"Although you advocate the PLCC version of the PIC it is only really suitable for a PCB. Much more work is required to wire it on a round pad Eurocard — but perhaps I misunderstood your article in the September issue of *Acorn User*. The 40 pin DIL version although having a larger footprint is easier to wire on a stripboard and is cheaper"

 Please note that in the latest circuit printed the last article had Vss and Vdd connections shown the wrong way round. Sorry about this. The current taken by this chip (with no I/O loading) is about 7 to 15 mA if running at 20MHz, slightly less if slower. So it is almost certain that it is the wrong way round, if it doesn't get too hot you might get away with it but it looks like you might have

killed it. There is no problem with putting the buffer on the board, the only thing is that you will have to do this on each design you make. However, I did find that I was getting a bit of trouble when I had a complex project and the programming module connected. What was happening was that the PIC seemed to be crashing after about 30 seconds when connected to the computer and not when it was free standing.

I cured this by holding the program pin RB3 low when running instead of letting it float. I did this in software, but an alternative would be to put a 10K pull-down on this pin. If you include these buffers on your final board make sure that the inputs are tied to the appropriate level or the buffer chip is removed before cutting the umbilical to the computer.

I found the square pad board easy to wire up using thin insulated wires but the 40 pin package is fine, just remember to change the pin numbers in the diagram. The data sheet is available on the *Acorn User* Web site, and it should be on the CD with this issue.

 Richard Ashbery is also working with the PIC and has a few more problems: "I am using your ICP programmer to 'blow' a PIC16F874. The program reports 'blown OK' but fails verify. Here are two examples:


Program memory fail at 2EF : Read 3F7D should be 3F6D

Program memory fail at 38F : Read 387F should be 307F

"I have used the hex file — *SerialIO/H* (generated from your source code *SerialIO* on the *Acorn User* Dec 1998 RTR disc). Could the hex file be at fault here? Can anything be usefully obtained from the saved 'hex' file generated by the ICP.

"Another query concerns the RS232 serial port and MAX202 level translator. Being a complete 'PIC' novice am I right in thinking that in order to use the Serial PIC

monitor program (*SerialPIC* program from RTR in *Acorn User* Dec 98) the PIC flash memory must have a correctly blown and verified PIC image before it will work?"

 When it says "Blown OK" it actually does a read back after each individual program word. What I really need to know is do you have code in that area of memory and is it reporting the numbers you expect to see correctly? Have you tried doing a whole chip erase and then trying again?

The saved hex file contains all the locations of the chip, even the blank ones, and can be used to read in a device that you have not programmed or one that you suspect as being faulty. In that way if you identified certain memory locations as being faulty you could write your code to avoid them and still use the device.

Now the serial I/O program from the December 98 *Acorn User* was designed for the PIC16C84 not for this processor. The main difference being that the 874 can run at 20MHz where as the 16C84 can only run at 4MHz with the 16F84 running at 10MHz. The code generates a serial port by using software delays and so if the processor is running at a different speed the delay loops won't produce the same delays. A much better solution with the 874 would be to use the internal serial port. Mind you the numbers you feed into the baud rate generator are processor-clock dependent.

The Serial Port monitor program simply passes bytes back and forth like a simple terminal emulator, so you do need a PIC that knows how to respond to these bytes, that is programmed. The monitor communicates at 9600 baud so the PIC must be able to send at this speed.

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Show me the

Despite the recent appearance of ground-breaking RISC OS hardware, I believe the platform is slowly dying due to an apparent lack of software.

Not that there isn't any good software around. Much of it is really excellent and I, for one, am able to run every aspect of my own small business very adequately using nothing else — from CNC manufacturing to publicity materials, and from customer records to Internet communications.

But look through the adverts in current issues of *Acorn User* and you'd be forgiven for thinking that there's very little software at all — the Christmas edition, for example, contains over 17 pages are devoted to hardware but less than 5 pages to a miserly selection of software, much of it tucked away out of sight.

So where is it all? Where are the eye-catching adverts promoting all the excellent titles which are available? An outsider wouldn't know it exists and even committed RISC OS users find it hard to know what's available and from whom they can buy it.

Acorn User would be doing us all a great favour if it encouraged every software house to advertise its wares. And every retailer should be encouraged to devote half their advertising space to selling software — after all software and hardware go together and one is of no use whatsoever without the other.

But *Acorn User*, itself, could help too. How about a regularly published list of all RISC OS software, complete with prices and sources? Or a different page each month from the excellent new Products Directory on the RISC OS Ltd Web site? Such a published list would quickly become the first place to turn to when seeking new software.

Both the Beebug catalogs of old and Ian Copestake's adverts in *Acorn User* used to fulfil a similar function. Finally, since so much excellent

software is now unsupported, shouldn't an organisation like RISC OS Ltd be taking over key titles (such as *Font Directory Pro*) without which their continued development of the platform seems less likely to succeed?

What do you think?

Chris Bell
Highpath Engineering

We need manuals

Thank goodness somebody is doing something about the chaos over manuals for the ordinary e-mail and Internet user! Please do more.

I, like Mr Hodgson, migrated from BBC B's via hideous Arthur to stable, usable, RISC OS and good old easily followed DOS to unstable, convoluted Windows. I got Clares truly basic package for the Internet (*WebsterXL*, *Messenger*, *Newshound*, *Newsbase*) some time ago and have not dared upgrade because of complexities of on-screen manuals, some of which will not print out anyway. I find R-Comp very friendly, but, dare I say it, totally unhelpful for a senior citizen amateur like myself?

Finally, yes. It is in the Internet field that RISC OS is slipping behind and this is the way of future development which is drowning all those worlds where RISC OS excels.

Elwyn Morris
Harwich

Internet capability

With all this talk about the future of RISC OS I would just like to make the following comments. Most of the people I know in New Zealand use PCs and use them mainly for the internet. Can RISC OS compete, the short answer is a big no. I have two browsers, *Acorn Browse* and the ANT Suite, both of which you could say are now past their sell by date.

The ANT Suite was expensive and I am sure like me other people though that they were investing in a piece of software for the future, not

just a quick buck for the software house. ANT Suite is still been sold for over £100 but it is not been given any support by Ant.

How can RISC OS push into the education market when most, if not all schools require the Internet? We are told that RealAudio is available for RISC OS but is tied up with licences. This version of RealAudio is now out of date because the internet does not stand still.

What we need is a browser with all the whistle and bells for RISC OS to survive and if we have to pay a premium for these so be it, but someone has to give us the choice.

Alan
via e-mail

Good service

Having been an Acorn / RISC OS user and avid *Acorn User* reader since 1986, I thought it was about time I put finger to keyboard and write a letter in praise of my local supplier. To set the scene, I work at Southampton University where I carry out research and teaching in acoustics and audio.

In the 1980s, our department had two BBC Bs which were used to control laboratory equipment via an IEEE488 interface, and my first experience of 'real' programming involved putting together a theoretical model of a tube with holes in it on one of these machines. So impressed was I with the ease with which I learned to use BBC BASIC, and the performance of the computer, that I was prompted to buy a (secondhand) BBC Master for my own use.

This computer served me well until the Archimedes was announced; I had to have one, and my kindly sponsor agreed to purchase an A310 complete with the 'Arthur' operating system for use on his project. That A310, bought (I think) in 1988, is still running today, albeit now with RISC OS 3, ARM3, 8Mb of RAM, two hard discs and

software

many podules! Since those days, I have strongly resisted the trend of the rest of the department to use PCs, and I now use two Risc PCs, one at work the other at home, as well as an old A4 for the odd bit of field work.

The Risc PCs are both used for everything from data acquisition, through number crunching and data handling using my own suite of programs, to report writing using either *Impression Publisher* or *Techwriter*, the latter of which allows me to export MS Word documents for others to read.

I have a PC card in the one at work, but this is only used to talk to our network. Needless to say, I

consider the Risc PC to be an excellent machine for all manner of uses and that it is especially suited to an active research environment where novel tasks have to be carried out efficiently.

Most of these computer systems were purchased from Intelligent Interfaces, a company whose name many readers will recognise from adverts in this magazine for their range of interface cards and so on. Over the years, the level of support offered by Intelligent Interfaces has been exemplary. Not only have they advised me on what to purchase and supplied exactly what I want when I want it, but they have also volunteered countless pieces of

advice on any possible compatibility problems and how to overcome them.

In addition, they have offered support on other issues such as programming and even supplied example programmes. My experience has proved that the advice given is, to my recollection, always sound and that they really know what makes these computers tick! I would strongly recommend that anyone using, or considering using, a RISC OS-based machine for serious scientific work give Intelligent Interfaces a try; you will not be disappointed.

Dr K R Holland,
Poole, Dorset

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Gill & Toby Smith

I have three things which I associate with The ARM Club: dodgy currency deals in an hotel in the Netherlands; being chased down a street in Utrecht by a restaurant owner because someone had

not paid in the current currency; and the third is the happy smiley Mr and Mrs ARM Club. There is one character who links all three and this is Toby Smith. Mrs ARM Club is his wife Gill Smith.

Toby is the Chairman of The ARM Club. Gill among other things writes Gill's Journal in *Eureka!*, the club magazine. Gill's Journal I think is best described as witty social commentary.

'I get people telling me they really identify with what I write,' laughs Gill 'I think to myself please don't tell me that, at least tell me it's a friend. I do spend my time trying to sort out members love lives.'

'I remember' adds Toby 'going out to dinner with one member (who shall remain un-named to protect the innocent), because he wanted advice on how to pull women. After the meal was served the member was shrieking 'what's this green stuff on my plate', we decided that the answer for him was he had to totally re-invent himself.'

It was no surprise to find out that Gill would like to get into comedy writing. I think with her experiences from The ARM Club she has enough material for something, especially with all the hype about dotcoms and the ever-increasing usage of computers and the Internet.

'I would like to write comedy, explains Gill 'I was very distressed, have you seen the TV show "Attachments"? I had roughly got that basic idea but I did not feel the need to have them shagging every five minutes. Now I have to come up with another idea.'

Strange as it may seem, Gill and Toby were happy that Acorn had decided to cancel the Acorn World Show two years ago. They had picked a date for their wedding which turned out to be the same date as the show and this originally had given ARM Club committee members a worry as to where their loyalties lay. Toby's

involvement with The ARM Club goes back a long way.

'I used to go to school with Simon Burroughs who started out in the original ARM Club. As with most people on the committee after you have been to a certain number of shows you end up feeling guilty about free meals and take on more responsibility. The Chairman's role is moderately undefined, in that he just keeps things running and makes sure it has direction and he tries to avoid doing any other work.

"The only technical role is running the Christmas meal. With a volunteer community you have to keep everyone happy and this we try to do *this as much as possible*. The ARM Club will continue as long as people want us to continue. The Club changes with the times, to meet the demands of our members. There is a most fantastic sense of community, with everyone helping each other, everyone is interest and committed. You get a hobbyist and an enthusiast, they all passionately love their machines.'

'I got roped in, I have to confess,' says Gill 'It was gradual for me, even though my friends say it was obvious from the start that I would end up doing something 'spodish' due to my ability to turn a computer on. Way back, my father went to see a man about a dog. No puppy, instead we got an Acorn Electron. That was very exciting and I did lots of bits and pieces. I learnt a little bit of Basic. Then stopped for years'

Besides Gill's Journal, Gill works as a freelance editor and technical author. The modest Toby works for an Internet company in Newbury called Smartgroup.com playing around with big servers. Basically keeping it going 24/7/365.

'The idea is to make it fully automated so it runs by itself and I can sit around all day doing nothing — if it goes down this rings.' He points to his mobile phone.

At which point the phone rings, its Mark (not current currency) Smith wanting to know where Mr&Mrs are. Mark appears, Gill and I enter into a discussion on her theory that if you are 'spod' you are more likely to get married if you eat tomatoes. So 'Shake that Money Maker' boys.

Jill Regan

There is a fantastic sense of community

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